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CONTENTS

	Page
APPAREL	260
CHEMICAL AND ALLIED PRODUCTS	260
Drugs and Pharmaceuticals	260
Dyes	261
Detergents	261
Agricultural Chemicals	261
Plastics and Plasticizers	261
Paints, Varnishes and Lacquers	263
Ordnance Chemicals	263
Analytical Chemistry	263
Chemical Engineering and Equipment	263
Miscellaneous Chemicals	264
ELECTRICAL MACHINERY, EQUIPMENT, AND SUPPLIES	269
Communication Equipment	269
Electronics	270
Generators, Motors, Transmission, Distribution, and Allied Equipment	273
Miscellaneous	273
FOOD AND KINDRED PRODUCTS	275
FUELS AND LUBRICANTS	276
HIGHWAYS AND BRIDGES	278
INSTRUMENTS	279
LEATHER AND LEATHER PRODUCTS	281
LUMBER AND WOOD PRODUCTS	281
MACHINERY (EXCEPT ELECTRICAL)	281
MEDICAL RESEARCH AND PRACTICE, INCLUDING CLINICAL APPLICATION OF DRUGS AND PHARMACEUTICALS	286
METALS AND METAL PRODUCTS	294
METEOROLOGY AND CLIMATOLOGY	299
MINERALS AND MINERAL PRODUCTS, INCLUDING STONE, CLAY AND GLASS	299
ORDNANCE AND ACCESSORIES	300
PACKING AND PACKAGING	302
PAPER AND ALLIED PRODUCTS	302
PHOTOGRAPHIC AND OPTICAL GOODS	303
PHYSICS	304
General	304
Nuclear	304
PHYSIOLOGY	311
PRINTING, PUBLISHING AND ALLIED INDUSTRIES	311
PSYCHOLOGY	311
RUBBER AND RUBBER PRODUCTS	312
STRUCTURAL ENGINEERING, INCLUDING BUILDING MATERIALS	313
TEXTILES AND TEXTILE PRODUCTS	313
TRANSPORTATION EQUIPMENT	313
Aeronautics	313
Aircraft	313
Instrument	316
Engines and Propellers	318
Training and Training Devices	323
Aerodynamics	324
Rockets and Jet Propulsion	324
Land Transportation	324
Marine Transportation	325
WATER SUPPLY, SANITATION AND PUBLIC HEALTH	326
MISCELLANEOUS	327
PATENTS	335
Chemicals and Allied Products	335
Instruments	336
Machinery	336
Rubber and Rubber Products	336
Miscellaneous	336

Price changes:

PB 78657. Yeater, Fred W., Jr. "184" cyclotron. 4p. Mi $1.00 Ph $1.00 (Bib. v. 6, p. 327)

PB 79309. Adams, D. A. W. and others. I. G. Farbenindustrie A.G. Manufacture of sulphur dyestuffs and their intermediates at Mainkur. Mimeo $.75. (Bib. v. 8, p. 846)

PB 80331. Direnga, O. G. and Leaper, P. J. Production of acetylene from methane in a regenerative type furnace. Mi $2.50 Ph $6.25. (Bib. v. 7, p. 947)

PB 81819. Brandner, John D. and others. Synthetic detergents. Mi $4.75 Ph $15.00. (Bib. v. 7, p. 1134)

PB 81822. Rooney, John F. Utilization of tall oil in Germany. Mi $2.00 Ph $3.75. (Bib. v. 8, p. 199)

APPAREL

PB 92107

Bartz, Theodore J. and Hunt, Robert S., Jr.
Comparative test of suit-flying, light, lined, one-piece, and suit-flying, light, gabardine, type L-1. Apr 1948. 19p photos, tables Mi $1.75 Ph $2.50
I. Suits, Flying—Tests

PB 92849

Goldenson, Jerome and Sass, Samuel.
Estimation of the miticides p-cresyl benzoate (p-tolyl-benzoate) and 2-thenyl salicylate in clothing. Memorandum report. Nov 1947. 26p graphs, tables Mi $2.00 Ph $3.75
The object of project A 10.5-2 is to provide methods of chemical analysis for insecticides, miticides, and repellents as required for control of plant production, standardization of purity and impurity levels, and for development of new processes and new products; also to devise procedures to estimate the agent contained in impregnated cloth and in impregnating formulations. p-Cresyl benzoate (p-tolyl benzoate) and 2-thenyl salicylate have been found to be good miticides and are being studied under project D 3.1-5b as possible miticidal impregnants for clothing. The object of the work described in this report was to devise simple and rapid chemical methods, applicable to impregnated clothing, of estimating these compounds in order to evaluate various impregnating formulations and the depletion of the impregnant in the cloth after laundering or storage under tropical conditions.

PB 90758

Rost, H. & Co., Hamburg, Ger.
Specifications for the use of industrial protective aprons. Jan 1945. 4f table (Text in German) Mi $1.25 Enl Pr $2.50
See also BIOS FR 349, Item 22 (PB 23858)
For abstract, see PB 90758s 1p. Mi $1.25 Ph $1.25
I. Aprons, Industrial—Specifications—Germany

CHEMICALS AND ALLIED PRODUCTS

Drugs and Pharmaceuticals

PB 74405s

Bohme Fettchemie G.m.b.H., Chemnitz, Ger.
Data on the production of pharmaceuticals. 1947. 2p Mi $1.25 Ph $1.25

PB 1685s

Curare obtained from laboratory of Heinrich Wieland, University of Munich. Abstract. 1945.
26p Mi $2.00 Ph $3.75
I. Curare—Research—Germany

PB 1707s

Documents removed from the Chemical Research Laboratory of Dr. Böttcher, Kronach, Bavaria. Abstracts. 1944.
4p Mi $1.25 Ph $1.25
Abstracts an article "Pharmacology and chemistry of Adrenochromes," by P. Marquardt; and a manuscript on a new class of sulfurized organic compounds "Trithione," by B. Böttcher and A. Lüttringhaus.

PB 93492

Gartside, H. and others.
Pharmaceuticals—tabletting, ampouling and packing in selected German factories. Jul 1946. 229p photos, drawings, diagrs, tables Mi $8.00 Ph $28.75
I. Pharmaceuticals—Processing—Germany 2. Ampoules—Preparation—Germany 3. Containers, Pharmaceutical—Germany 4. BIOS FR 1701, Item 22

PB 1708s

I. G. Farben test data on antimalarials. Abstracts. 1941-1944. 10p Mi $1.25 Ph $1.25
I. Antimalarials—Germany 2. Atabrine—Germany

PB 74648s

I. G. Farbenindustrie A. G., Höchst, Ger.
Details of analytical tests and specifications for large variety of pharmaceuticals. (Abstract). 1927-1944. 17p Mi $1.75 Ph $2.50
I. Micro FIAT L 8, Frames 1801-2981, abstract

PB 74792s

I. G. Farbenindustrie A. G., Wuppertal, Ger.
Production and testing of pharmaceuticals. 1938-1941. 4p Mi $1.25 Ph $1.25
Supplement 1 to PB 74792
Abstracts of Micro FIAT M 96, Frames 6708-6876 (PB 74792)

PB 4674s

I. G. Farbenindustrie A. G., Wuppertal, Ger.
Production and uses of pharmaceuticals and intermediates. 1924-1945. 18p (Text in German and English) Mi $1.75 Ph $2.50
Index to Micro FIAT MP 13, Frames 1-1007 (PB 4674)

PB 1683s

I. G. Farbenindustrie A. G., Wuppertal-Elberfeld, Ger.
Translation of reel 3 or SG reel 3. Abstracts 1940-1945. 16p Mi $1.75 Ph $2.50
Material deals mainly with drugs and pharmaceuticals. See listing of PB 1683 in V. I, p. 752 of this Bibliography.

PB 1701s

Pharmaceuticals and insecticides at I. G. Farben plants Elberfeld and Leverkusen. Documents 1-12. Abstracts. 1925-1944. 76p Mi $3.50 Ph $10.00

PB 74381s

Schering, E., A. G., Berlin

Production report on pharmaceutical preparations and similar organic products. 1946. 2p Mi $1.25 Ph $1.25

Dyes

PB 91290

I. G. Farbenindustrie A. G., Höchst, Ger.

Buildings and plant for dye-stuff manufacture. 1931-1941. 65f drawings only Mi $3.00 Enl Pr $10.00

Legends in German

(Some frames will not reproduce well)

For abstract, see PB 91290s 1p. Mi $1.25 Ph $1.25

I. Dye industry—Plant design—Germany 2. Micro BIOS FD 2905/46, Frames 1-19

PB 74078s

I. G. Farbenindustrie A.G., Frankfurt am Main, Ger.

Color register arranged in groups and alphabetical and group register for refining and accessory products in textiles. 1939. 2p Mi $1.25 Ph $1.25

This abstract also embraces Micro FIAT CC 275 (PB 74140)

PB 70060s

I. G. Farbenindustrie A. G., Ludwigshafen, Ger.

I. G. Farben dye standards. 1929-1942. 10p Mi $1.25 Ph $1.25

This abstract also embraces reel Micro FIAT G 20, Frames 876-1667 (PB 70061)

PB 91005

I. G. Farbenindustrie A. G.

Preparation of miscellaneous dyes. 1946. 55f (Text in German) Mi $2.75 Enl Pr $8.75

See also BIOS FR 1155, Item 22 (PB 79309)

I. Dyes—Preparation—Germany 2. Micro BIOS FD 1934/47, Frames 1-54

PB 17677s

I. G. Farbenindustrie A. G.

Reports on the 6th and 7th meetings of the Azo Dyes Commission (Ako), Dec 1933 and Jul 1934. Jan 1946. 20p (Text in German and English) Mi $1.75 Ph $2.50

Index to Micro FIAT C 88, Frames 1-890 (PB 17677)

PB 93706

Lederle, Ekbert.

Bleichromatfarben. (Lead chromate pigments). Jan 1937. 80f (Text in German) Mi $3.50 Enl Pr $11.25

Supplement to FIAT Final Rept 804 (PB 22628)

Detergents

PB 91922

Harkins, William D. and others.

Structure of soap micelles indicated by X-rays and the theory of molecular orientation. I. Aqueous solutions. Feb 1946. 11p photos, diagrs, graphs, tables Mi $1.75 Ph $2.50

I. Soap solutions

Agricultural Chemicals

PB 92848

Goldenson, Jerome and Sass, Samuel

Study of DDT decomposition when dispersed in oil solution by smoke and insecticide generator E15 (modified mechanical smoke generator M2). Mar 1948. 21p tables Mi $2.00 Ph $3.75

I. DDT—Dispersion 2. CWS TDMR 1338

PB 94485

Greenberg, Shirley G.

Progress on studies of insecticides, miticides and mosquito repellents for clothing impregnation during 1946-1947. Feb 1948. 27p tables Mi $2.00 Ph $3.75

I. Insecticides—Research 2. Miticides—Research 3. Insect repellents—Research 4. Clothing, Impregnated 5. CWS TDMR 1342

PB 93495

Maclennan, W. H. and others.

The German superphosphate industry. Sep 1946. 153p drawings, tables, diagrs, photos Mi $6.00 Ph $20.00

I. Chemische Dünger-fabrik, Rendsburg, Ger. 2. Guano Werke, A. G., Lübeck/Dänischburg, Ger. 3. Fertilizers and Manures—Manufacture—Germany 4. Phosphates—Production—Germany 5. BIOS FR 1743, Item 22

PB 93707

Magram, Sidney J.

Development of rodenticide cartridge pyrotechnic production of carbon monoxide. Memorandum report. 1947. 39p photos, tables Mi $2.25 Ph $5.00

I. Rodenticides—Research 2. Carbon monoxide—Production 3. CWS TDMR 1323

Plastics and Plasticizers

PB 92402

Courtney-Pratt J. S. and others.

Examination of two plastic bearing materials. May 1943. 7p tables Mi $1.25 Ph $1.25

I. Bearings—Materials—Australia 2. Ball bearings—Australia 3. Bearings, Sleeve—Australia

PB 25620s

I. G. Farbenindustrie A. G.
Reports on plastics, Leuna Werke and Ammonia Werke, Merseburg. Apr 1946. 4p (Text in German and English) Mi $1.25 Ph $1.25
Index to Micro FIAT C 177 and R 177, Frames 1-688 (PB 25620)

PB 4671s

Joint Intelligence Objectives Agency.
Selected books on macromolecular materials and corrosion protection requested for microfilming. Nov 1945. 2p (Text in German and English) Mi $1.25 Ph $1.25
Index to Micro FIAT C 17. (PB 4671)

PB 33460s

Krzikalla and others.
Neue esterharze auf anthracinbasis. (New resins with anthracene basis). Nov 1941. 8p (Text in German) Mi $1.25 Ph $1.25
Supplement 1 to PB 33460
1. Resins, Synthetic—Production—Germany 2. Resins—Esters—Germany 3. I. G. Farbenindustrie A. G., Ludwigshafen, Ger.

PB 33460s2

Krzikalla (Dr.)
Rosin, acrylic acid, ester, resins. Nov 1941. 3p tables Mi $1.25 Ph $1.25
Supplement 2 to PB 33460
1. "KA" resins (Trade name) 2. Resins—Production—Germany 3. Rosin—Condensation products—Germany 4. Acrylic acid—Esters—Germany 5. I. G. Farbenindustrie A. G., Ludwigshafen, Ger.

PB 40885s

Pistor (Dr.)
Spaltung von vinylmethylather mit hilfe einem saurehaltigen festangeordneten kontaktes. May 1942. 11p drawings, tables (Text in German) Mi $1.75 Ph $2.50
(Will not reproduce well)
1. Methyl ether—Germany 2. Ether, Vinyl—Preparation—Germany 3. I. G. Farbenindustrie A. G., Ludwigshafen, Ger.

PB 40816s2

Reppe, Julius Walter
Methoden der Vinylierung. Mar 1945. 36p tables Mi $2.25 Ph $5.00
1. Vinylation

PB 40816s

Reppe, Julius Walter
Vinylierungen, n.d. 167p tables (Text in German) Mi $6.25 Ph $21.25
(Pages 155-167 missing)
1. Vinylation

PB 25633s7

Reppe, Julius Walter
Wissenschaftliche arbeiten der I. G. auf dem gebiet der synthetischen harzsäuren und trocknenden ole. Feb 1940. 22p diagr (Text in German) Mi $2.00 Ph $3.75
Supplement 7 to PB 25633
1. Resins, Synthetic—Germany 2. Drying oils, Synthetic—Germany 3. I. G. Farbenindustrie A. G., Ludwigshafen, Ger.

PB 11396s

Schuster (Dr.) and Keller (Dr.)
Versuche zur Darstellung von Acrylsäure und Acrylsäureester. (III). Jul 1940. 15p tables (Text in German) Mi $1.75 Ph $2.50
1. Plastics, Acrylic—Germany 2. Plastics—Raw materials—Germany 3. Acrylic acid 4. Acrylic acid esters 5. I. G. Farbenindustrie A. G., Ludwigshafen, Ger.

PB 92850

Steinmetz, Theodore P. and Raun, Milton A.
Prevention of thread contamination during chemical munitions' filling. Mar 1948. 31p photos, tables Mi $2.25 Ph $5.00
1. Coatings, Plastic 2. Screw threads—Protection 3. CWS TDMR 1276

PB 21270r

U. S. Air Force and U. S. Navy Dept.
Coating: Permanent resin (for internal engine parts). Air Force-Navy aeronautical specification. Jul 1948. 11p Mi $1.75 Ph $2.50

PB 21297a3

U. S. Air Force and U. S. Navy Dept.
Compound: Soft-film corrosion-preventive. Air Force-Navy aeronautical specification. Mar 1948. 2p drawing Mi $1.25 Ph $1.25

PB 93124

U. S. War Dept. and U. S. Navy Dept.
Plastic-materials. Anti-electrostatic, clear, transparent (for indicating-instrument windows). Feb 1946. 20p drawings, tables Mi $1.75 Ph $2.50
1. Plastic, Transparent

PB 93126

U. S. War Dept. and U. S. Navy Dept.
Plastic-materials: Laminated thermosetting sheets and plates. Sep 1944. 85p photos, drawings, fold tables Mi $3.75 Ph $11.25
1. Plastics, Laminated—Molded

PB 74374s

Wacker, Alexander, Gesellschaft für Elektrochemische Industrie G.m.b.H., Munich, Ger.
Reports on inorganic and organic methods in the production of plastics and intermediates. 1946. 15p Mi $1.75 Ph $2.50

Paints, Varnishes and Lacquers

PB 13094s

I. G. Farbenindustrie A. G.
Special raw materials and equipment for paints, varnishes and lacquers. Dec 1945. 1p Mi $1.25 Ph $1.25
Index to Micro FIAT C 51, Frames 1-61 (PB 13094)

PB 92783

Martin, S. R. M., comp.
Glossary: Paint, varnish and resin industry. n.d. 8p Mi $1.25 Ph $1.25
1. Paint industry—Dictionaries 2. Varnish industry—Dictionaries 3. Resin industry—Dictionaries

PB 21590a

U. S. Air Force and U. S. Navy Dept.
Primer: Zinc chromate. Air Force-Navy aeronautical specification. Jul 1948. 2p Mi $1.25 Ph $1.25

PB 93307

U. S. Air Force and U. S. Navy Dept.
Tinting paste: Zinc chromate primer. Air Force-Navy aeronautical specification. Jun 1948. 6p tables Mi $1.25 Ph $1.25
1. Paints, Priming—Specifications

Ordnance Chemicals

PB 74781s

Dynamit A. G., Troisdorf, Ger.
Experiments in the field of explosives chemistry. 1940-1944. 3p Mi $1.25 Ph $1.25
Supplement 1 to PB 74781
Abstracts to Micro FIAT M 179, Frames 1-133

PB 74698s

Dynamit A. G., Troisdorf, Ger.
Production and testing of primers and explosives. 1937-1946. 7p Mi $1.25 Ph $1.25
Supplement 1 to PB 74698
Abstracts to Micro FIAT M 155, Frames 1-625

PB 92851

Rush, Cecil A. and Danner, Charles E.
Analysis of gaseous phosgene. Nov 1947. 12p tables Mi $1.75 Ph $2.50
1. Phosgene 2. CWS TDMR 1343

PB 31091s

Weissweiler (Dr.) and others.
Acetylenzersetzung V-äther-fabrik Lu 606. May 1941. 5p (Text in German) Mi $1.25 Ph $1.25
1. Explosives—Preparation—Germany 2. Acetylene—Germany

Analytical Chemistry

PB 48678s8

I. G. Farbenindustrie A. G., Ludwigshafen, Ger.
Anhang zur bedienungsanweisung für den ultrarotabsorptionsschreiber (Uras). Prüfverfahren und behebung von strörungen. n.d. 28p photo, diagrs, graphs, tables (Text in German) Mi $2.00 Ph $3.75
Supplement 8 to PB 48678
1. FIAT FR 708-8

PB 48678s6

I. G. Farbenindustrie A. G., Ludwigshafen, Ger.
Beschreibung und bedienungsanweisung für den ultrarotabsorptionsschreiber (Uras). Type A. Apr 1941. 3p (Text in German) Mi $1.25 Ph $1.25
Supplement 6 to PB 48678
1. FIAT FR 708-6

PB 48678s5

Luft, Karl
Analyse von stoffgemischen mittels selektiver modulation von strahlung. n.d. 7p (Text in German) Mi $1.25 Ph $1.25
Supplement 5 to PB 48678
1. FIAT FR 708-5

PB 48678s9

Luft, Karl
Über die anwendung des ultraroten spektrums in der chemischen industrie. n.d. 32p tables (Text in German) Mi $2.25 Ph $5.00
Supplement 9 to PB 48678
1. FIAT FR 708-9

Chemical Engineering and Equipment

PB 92887

British Intelligence Objectives Sub-Committee
Manufacture of hydrogen peroxide at Otto Schickert & Co., Bad Lauterberg, Ger. n.d. 2p photos only Mi $1.25 Ph $1.25
1. Hydrogen peroxide—Production—Design—Germany

PB 81693s

I. G. Farbenindustrie A. G.
Catalytic cracking experiments. Summary reports, 1937-1938. Dec 1945. 12p (Text in German and English) Mi $1.75 Ph $2.50
Index to Micro FIAT LF 31 and TOM 146, Frames 1-810 (PB 81693)

PB 90810

I. G. Farbenindustrie A. G., Leverkusen, Ger.
Drawings of plant, and flowsheets relating to the manufacture of phenol and vulcacit. n.d. 27f drawings only Mi $2.00 Enl Pr $5.00
Legends in English

1124/885 referred to on p. 20 of BIOS FR 661, Item 22 (PB 47735)

1124/886 referred to in BIOS FR 664, Item 22 (PB 49372)

For abstract, see PB 90810s 2p Mi $1.25 Ph $1.25

I. Phenol—Production—Germany 2. Vulcanization—Accelerators—Production—Germany 3. BIOS FR 661, Item 22 LD 4. BIOS FR 664, Item 22 LD

PB 91355

I. G. Farbenindustrie A. G.

Works instructions, drawings, production processes of various chemicals. 1937-1945. 266f diagrs (Text in German) Mi $9.00 Enl Pr $35.00

For abstract, see PB 91355S 4p Mi $1.25 Ph $1.25

I. Chemicals—Production—Germany

PB 12273s

Kirschbaum, Emil and others.

Reports on packed columns and allied subjects. 1941-Nov 1945. 3p Mi $1.25 Ph $1.25

Index to Micro FIAT C 11 (PB 12273)

PB 93494

Peake, J. G. and others.

Drying and filtration in the German chemical industry. Jul 1947. 190p drawings, diagrs, photos Mi $6.75 Ph $23.75

I. Filter presses, Rotary vacuum—Germany 2. Filters, Chemical—Germany 3. Filtration—Germany 4. Drying—Research—Germany 5. Dryers—Germany 6. BIOS FR 1587, Item 22

PB 92780

Ringleb, F.

Exact solutions of the differential equations of an adiabatic gas flow. Aug 1940. 29p graphs Mi $2.00 Ph $3.75

I. Gas flow—Germany 2. Flow, Fluid—Germany 3. Shock waves—Germany

Miscellaneous Chemicals

PB 88843

Bogrow, Alexander

Alkylamine manufacture and research at Ammoniakwerk Merseburg G.m.b.H. (Leuna). Feb 1948. 34p diagrs (5 fold) Mimeo: $1.00

I. Amines, Alkyl—Production—Germany 2. Amines, Alkyl—Research—Germany 3. FIAT FR 716

PB 18852s13

Burgard (Dr.) and Christ (Dr.)

Explosion of acetylene in vinylating n-propyl-alcohol in pressure tower 249a on 14.7.38. Jul 1938. 3p Mi $1.25 Ph $1.25

I. Acetylene—Germany 2. Vinylation—Germany 3. Ethers, Propyl-vinyl—Germany 4. Explosions, Acetylene—Germany

PB 93487

Coursey, P. R. and others.

Interrogation of Dr. Engelhardt on the production of the synthetic waxes, nibren and clophen, (chlorinated naphthalene and chlorinated diphenyl). Mar 1947. 17p table Mi $1.75 Ph $2.50

I. Biphenyl, Chloro—Production—Germany 2. Naphthalenes, Chloro—Production—Germany 3. BIOS FR 1736, Item 22

PB 74341s

Deutsche Gold-und Silberscheideanstalt A. G., Frankfurt am Main, Ger.

Chemical reports and books. 1942-1945. 4p Mi $1.25 Ph $1.25

Supplement 1 to PB 74341

Abstracts to Micro FIAT G 295, Frames 3005-3458

PB 93356

Dietrich (Dr.)

Versuche zur Reaktion zwischen Braunstein und $MgCl_2$ bzw. Karnallit. (Experiments on the reaction between lignite and $MgCl_2$ or carnallite). Mar 1938. 5p tables (Text in German) Mi $1.25 Ph $1.25

I. Lignite—Reaction with magneisum chloride—Germany 2. Magnesium chloride—Reaction with lignite—Germany 3. I. G. Farbenindustrie A. G., Bitterfeld, Ger.

PB 20863s

Eichwede, Heinz

Aufzeichnungen über gründung, entwicklung, organisation und mitglieder von TEA—Hauptgruppe 2—Kommissionen der I. G. Farbenindustrie A. G. (Notes on the foundation, development, organization and members of the commissions of the TEA (Technical Committee) of the I. G. Farbenindustrie A. G., comprising main group 2). Feb 1946. 8p (Text in German and English) Mi $1.25 Ph $1.25

Index to Micro FIAT C 123, Frames 1-445 (Pb 20863)

PB 93355

Espig (Dr.)

Kristallographische und optische Untersuchungen an Ammonnitrat, mit Rücksicht auf betriebstechnische Fragen. (Teil I). (Crystallographic and optical examination of ammonium nitrate, with regard to operating technique). Oct 1944. 30p photos, diagrs, drawings, tables (Text in German) Mi $2.00 Ph $3.75

I. Ammonium nitrate—Analysis—Germany 2. I. G. Farbenindustrie A. G., Bitterfeld, Ger.

PB 92779

Eucken, A. and Wicke, E.

Interpretation of heterogeneous dehydration catalysis by the exchange of hydrogen atoms. n.d. 5p diagr Mi $1.25 Ph $1.25

I. Wicke, E. 2. Catalysts, Dehydration—Germany 3. Isopropyl alcohol—Dehydration—Germany

PB 58641s

Friederich (Dr.) and Susich (Dr.) von
Über die partielle hydrierung einiger alkohole mit dreifachbindung. (Partial hydrogenation of some alcohols with triple bonds). Jun 1942. 23p tables (Text in German and English)
Mi $2.00 Ph $3.75
(English translation will not reproduce well)
I. I. G. Farbenindustrie A. G., Ludwigshafen, Ger.

PB 74939s

Goldschmidt, Theodor, A. G., Essen, Ger.
Preparation of organic halogenated compounds wetting agents olefins and the like. 1939-1944. 3p Mi $1.25 Ph $1.25

PB 70326s2

Hecht (Dr.) and others.
Über die katalytische acrylsäure butylesterdarstellung im rieselofenverfahren mit nickelkentakten. Aug 1941. 41p (Text in German)
Mi $2.50 Ph $6.25
I. I. G. Farbenindustrie A. G., Ludwigshafen, Ger.

PB 70326s6

Hecht (Dr.) and Gassenmeier (Dr.)
Versuche zur kontinuierlichen darstellung von acrylamiden aus aminen, kohlenoxyd und acetylen. Dec 1941. 16p graphs (Text in German)
Mi $1.75 Ph $2.50
I. I. G. Farbenindustrie A. G., Ludwigshafen, Ger.

PB 27713s2t

Hrubesch (Dr.) and Friedmann (Dr.)
Technisch durchführbare oberflächenmetallisierungs-verfahren. (Technical metal coating of surfaces). Jul 1944. 6p tables Mi $1.25 Ph $1.25
Supplement 2 to PB 27713
Translation of PB 27713s2
For German text see PB 27713s2
I. Adipic acid—Synthesis—Germany 2. Reppe synthesis—Germany 3. Coatings, Metallic 4. I. G. Farbenindustrie A. G., Ludwigshafen, Ger.

PB 25641s

I. G. Farbenindustrie A. G.
Constitutions and reports from various laboratories 1944-1945. Apr 1946. 6p Mi $1.25 Ph $1.25
Index to Micro FIAT C 84, Frames 1-188 (PB 25641)

PB 19928s

I. G. Farbenindustrie A. G.
Documents, drawings and reports on production of elements (Na,Mg,Ca, P, Cl), acids, bases, salts, alcohols, fertilizers, etc. with various important by-products. Mar 1946. 2p Mi $1.25 Ph $1.25
Index to Micro FIAT G 138, Frames 1-716 (PB 19928)

PB 25630s

I. G. Farbenindustrie A. G.
Documents on detergents, rubber chemicals, synthetic materials, insecticides, dyes, etc. Apr 1946. 19p (Text in German and English)
Mi $1.75 Ph $2.50
Index to Micro FIAT C 190, Frames 1-912 (PB 25630)

PB 12271s

I. G. Farbenindustrie A. G., Griesheim, Ger.
Information on the Griesheim plant prepared by the plant management for the I.G. Farbenindustrie Control Commission. Oct 1945. 2p
Mi $1.25 Ph $1.25
Index to Micro FIAT C 20 (PB 12271)

PB 25602s

I. G. Farbenindustrie A. G.
Manufacturing methods of the Basenfabrik, and other manufacturing methods. Apr 1946. 19p (Text in German) Mi $1.75 Ph $2.50
Index to Micro FIAT C85, Frames 1-1430 (PB 25602)

PB 17648s

I. G. Farbenindustrie A. G.
Miscellaneous collection of documents dealing mainly with the OXO process and plastics, 1937-1945. Dec 1945. 11p (Text in German and English) Mi $1.75 Ph $2.50
Index to Micro FIAT C 15, Frames 1-1149 (PB 17648) and Micro TOM 155, Frames 1-1149 (PB 17648)

PB 81695s

I. G. Farbenindustire A. G.
Miscellaneous reports on hydrogenation, 1937-1942. Jan 1946. 21p (Text in German and English) Mi $2.00 Ph $3.75
Index to Micro FIAT LF 52 and TOM 148, Frames 1-761 (PB 81695)

PB 27713s

I. G. Farbenindustrie A. G., Ludwigshafen, Ger.
New chemistry of carbon monoxide. Apr 1944. 32p diagrs Mi $2.25 Ph $5.00
Supplement 1 to PB 27713
I. Carbon monoxide—Germany

PB 74114s

I. G. Farbenindustrie A. G., Höchst, Ger.
Organic intermediate products of I. G. Farbenindustrie A. G. 1936. 3p Mi $1.25 Ph $1.25
This abstract also embraces Micro FIAT CC 274 (PB 74159)

PB 4681s

I. G. Farbenindustrie A. G.
Organic intermediates and dyes produced by I. G. Farbenindustrie. Nov 1945. 1p Mi $1.25 Ph $1.25

Index to Micro FIAT C 21, Frames 1-1792 (PB 4681)

PB 55987s

I. G. Farbenindustrie A. G., Frankfurt am Main, Ger.
Plant process diagrams (Abstract). 1946. 6p Mi $1.25 Ph $1.25

PB 20845s

I. G. Farbenindustrie A. G.
Processes for the purification of gases. Biological tests of miscellaneous chemicals, 1931-1943. Mar 1946. 1p (Text in German and English) Mi $1.25 Ph $1.25
Index to Micro FIAT C 128, Frames 1-945 (PB 20845) and Micro TOM 208, Frames 1-945 (PB 20845)

PB 73966s

I. G. Farbenindustrie A. G.
Production of organic chemicals. 1942-1946. 2p Mi $1.25 Ph $1.25

PB 81694s

I. G. Farbenindustrie A. G.
Reports about various research problems in relation to hydrogenation and cracking. Dec 1943. 4p (Text in German and English) Mi $1.25 Ph $1.25
Index to Micro FIAT LF 34 and TOM 147, Frames 1-266 (PB 81694)

PB 17650s

I. G. Farbenindustrie A. G.
Reports on chemical processes. Dec 1945. 29p (Text in German and English) Mi $2.00 Ph $3.75
Index to Micro FIAT LF 46, Frames 1-978 (PB 17650) and Micro TOM 168, Frames 1-978 (PB 17650)

PB 17682s

I. G. Farbenindustrie A. G.
Reports on chemical processes. Jan 1946. 9p (Text in German and English) Mi $1.25 Ph $1.25
Index to Micro FIAT LF 100, Frames 1-579 (PB 17682)

PB 81692s

I. G. Farbenindustrie A. G.
Reports on the effect of various catalysts in hydrogenation. 1935-1944. 12p (Text in German and English) Mi $1.75 Ph $2.50
Index to Micro FIAT LF 27 and TOM 145, Frames 1-538 (PB 81692)

PB 12274s

I. G. Farbenindustrie A. G.
Reports on the meetings of the Intermediate Products Commission (Zetko), 1935-1941. Dec 1945. 2p (Text in German and English) Mi $1.25 Ph $1.25
Index to Micro FIAT C 36, Frames 1-806 (PB 12274)

PB 4680s

I. G. Farbenindustrie A. G.
Reports on various fields of chemical technology. 1939-1944. 6p Mi $1.25 Ph $1.25
Index to Micro FIAT C 2, Frames 1180-1898 (PB 4680)

PB 20864s

I. G. Farbenindustrie A. G.
Reports presented at the Tanning Agents Conferences, 1935, 1938-1939; Reports of the Chromium Sub-Committee (Chrom Uko), 1938-1939. Feb 1946. 5p (Text in German and English) Mi $1.25 Ph $1.25
Index to Micro FIAT C 107, Frames 1-288 (PB 20864)

PB 25617s

I. G. Farbenindustrie A. G.
Semiannual reports for the use of the I. G. representatives. Mar 1946. 1p Mi $1.25 Ph $1.25
Index to Micro FIAT C 173, Frames 1-884 (PB 25617)

PB 90999

I. G. Farbenindustrie A. G., Ludwigshafen, Ger.
Sodium hydrosulphite and related compounds. 1941-1945. 26f tables, diagrs (Text in German) Mi $2.00 Enl Pr $5.00
Referred to in Addendum to BIOS FR 422, Item 22 (PB 34027)
For abstract, see PB 90999s 2p Mi $1.25 Ph $1.25
1. Sodium hyposulfite—Production—Germany

PB 17651s

I. G. Farbenindustrie A. G.
TEA Büro I.G. Farben reports relating to hydrogenation. Dec 1945. 13p (Text in German and English) Mi $1.75 Ph $2.50
Index to Micro FIAT LF 47, Frames 1-401 (PB 17651) and Micro TOM 163, Frames 1-401 (PB 17651)

PB 27124s

I. G. Farbenindustrie A. G., Ludwigshafen, Ger.
Uber eine bestimmung des propargylalkohols. Apr 1940. 16p tables (1 fold) (Text in German) Mi $1.75 Ph $2.50

PB 92784

Knieriem (Dr.) comp.
Chemical glossary comprising some metallurgical expressions realting to propellants. n.d. 55p Mi $2.75 Ph $7.50
1. Chemistry—Dictionaries 2. Propellants—Dictionaries

PB 78277s

Kroeper (Dr.) and others.
Reaction of carbon monoxide with olefins and alcohols. Oct 1940. 29p Mi $2.00 Ph $3.75

I. Carbon monoxide—Reactions—Germany 2. I. G. Farbenindustrie A. G., Ludwigshafen, Ger.

PB ~~25633~~ 96552

Kroeper and others.
Synthesis of acetic acid by reaction of carbon monoxide with methanol. 1941-1942. 26p tables Mi ~~$2.00~~ 1.75 Ph ~~$3.75~~ 2.62 See errata, v.11, #2
Supplement 1 to PB 25633
I. Acetic acid—Synthesis—Germany 2. I. G. Farbenindustrie A. G., Ludwigshafen, Ger.

PB 78277s3

Kroeper (Dr.)
Synthesis of fatty acid esters by the reaction of carbon monoxide with olefin and alcohols. n.d. 6p tables Mi $1.25 Ph $1.25
I. Fatty acids—Esters—Synthesis

PB 27713s3

Kroeper (Dr.) and others.
Synthesis of fatty acids by the reaction of carbon monoxide and water upon olefins. Jul 1943. 6p tables Mi $1.25 Ph $1.25
Supplement 3 to PB 27713
I. Olefins—Synthesis—Germany 2. Carbon monoxide—Synthesis—Germany 3. Nickel carbonyl—Germany 4. I. G. Farbenindustrie A. G., Ludwigshafen, Ger.

PB 27713s4

Kroeper (Dr.)
Synthesis of fatty acids from olefins, carbon monoxide and water. Jun 1943. 7p Mi $1.25 Ph $1.25
Supplement 4 to PB 27713
I. Carbon monoxide—Synthesis—Germany 2. Nickel carbonyl—Germany 3. Olefins—Synthesis—Germany 4. I. G. Farbenindustrie A. G., Ludwigshafen, Ger.

PB 78277s2

Kröper (Dr.) and others.
Über die herstellung von waschrohstoffen und textilhilfsmitteln aus ungesättigen kohlenwasserstoffen durch anlagerung von CO und alkoholen bzw. wasser. Jan 1941. 10p table (Text in German) Mi $1.25 Ph $1.25
I. I. G. Farbenindustrie A. G., Ludwigshafen, Ger.

PB 632s

Krzikalla (Herr) and Dornheim (Herr)
3. Action of hypochlorous acid upon dithiodibutyric acid and thiophane. 1942. 1p Mi $1.25 Ph $1.25

PB 92404

Lauder, I.
Investigation of cutting fluids. Sep 1940. 20p photos, diagrs, graph Mi $1.75 Ph $2.50
I. Cutting fluids—Australia

PB 88844

Liebling, Henry and Neubauer, Joseph A.
Hydrogen peroxide manufacture in Germany and Austria. Jul 1948. 72p diagrs, graph, tables Mimeo: $2.00
I. Hydrogen peroxide—Production—Germany 2. FIAT FR 1292

PB 93482

McAulay, Commander J. and others.
Hydrogen peroxide production at Hollriegelskreuth. Part I. General notes and potassium persulphate process. May 1947. 72p drawings, tables, graphs Mi $3.50 Ph $10.00
I. Hydrogen peroxide—Production—Germany 2. Potassium peroxydisulfate—Preparation—Germany 3. Electrochemische Werke München A. G., Höllriegelskreuth, Ger. 4. CIOS XXXIII-42, Item 22

PB 92949

Mecke, R.
Cyclooctatetraen. 1944. 11p tables Mi $1.75 Ph $2.50
I. Cyclooctatetraene—Germany 2. I. G. Farbenindustrie A. G., Ludwigshafen, Ger. 3. Freiburg. Universität. Institut für Physikalische Chemie

PB 25633s5

Merkel, Karl
Betreff: Über die reinen eisencarbonyle. (On carbonyle production). Feb 1941. 40p diagr, graphs, tables (Text in German) Mi $2.25 Ph $5.00
Supplement 5 to PB 25633
I. Iron carbonyls—Production—Germany 2. I. G. Farbenindustrie A. G., Ludwigshafen, Ger.

PB 607s2

Merkel, Karl
Über das nickelcarbonyl $Ni(CO)_4$. (On nickel carbonyl $Ni(CO)_4$). Feb. 1941. 42p graphs (10 fold), tables (Text in German) Mi $2.50 Ph $6.25
I. Nickel carbonyl—Preparation—Germany 2. I. G. Farbenindustrie A. G., Ludwigshafen, Ger.

PB 70326s3

Merkel, Karl
Über die katalytische acrylsäurebutylesterdarstellung im rieselofenverfahren mit polyglykolen als flüssigem kontaktträger und $NiBr_2$ als wirksamer kontaktsubstanz. Apr 1943. 23p tables (Text in German) Mi $2.00 Ph $3.75
I. I. G. Farbenindustrie A. G., Ludwigshafen, Ger.

PB 92948

Mittasch, A.
Über eisencarbonyl und carbonyleisen. May 1928. 7p tables Mi $1.25 Ph $1.25
I. Iron carbonyls—Germany 2. I. G. Farbenindustrie A. G., Oppau, Ger.

PB 25633s4

Niemann (Dr.)
Berichte Über verhandlungen bei der Chemisch-Technischen Reichsanstalt und beim Reichswirtschafts. Ministerium Über die genehmigung der Reppe-anlage in Schkopau. Sep 1941. 13p (Text in German) Mi $1.75 Ph $2.50
Supplement 4 to PB 25633
I. Reppe synthesis—Germany 2. I. G. Farbenindustrie A. G.

PB 25633s2

Niemann (Dr.)
Triedensplanung der chemischen Werke HÜls G.m.b.H., Marl Kr. Rechlinghausen. (Production of Chemische Werke HÜls G.m.b.H., Marl, Ger.). Jun 1945. 23p tables (Text in German) Mi $2.00 Ph $3.75
Supplement 2 to PB 25633

PB 70326s9

Pistor (Dr.)
Bericht Über die herstellung von adipinsäure aus tetrahydrofuran und kohlenoxyd. May 1944. 16p fold tables (Text in German) Mi $1.75 Ph $2.50
I. I. G. Farbenindustrie A. G., Ludwigshafen, Ger.

PB 70326s9t

Pistor (Dr.)
Report about the production of adipin acid from tetrahydrofuran and carbonmonoxide. May 1944. 4p Mi $1.25 Ph $1.25
I. I. G. Farbenindustrie A. G., Ludwigshafen, Ger.

PB 70326s8

Reindl (Dr.)
Über Eisencarbonylwasserstoff. Sep 1941. 7p (Text in German) Mi $1.25 Ph $1.25
I. I. G. Farbenindustrie A. G., Ludwigshafen, Ger.

PB 25633s14

Reppe, Julius Walter
Autobiography. n.d. 19p (Text in German) Mi $1.75 Ph $2.50
I. I. G. Farbenindustrie A. G.

PB 25633s8

Reppe, Julius Walter
New suggestions for Ludwigahafen. n.d. 2p Mi $1.25 Ph $1.25
Supplement 8 to PB 25633
I. I. G. Farbenindustrie A. G., Ludwigshafen, Ger.—Research

PB 25633s13

Reppe, Julius Walter
Synthese der adipinsäure aus tetrahydrofuran, wasser und kohlenoxyd. 1940-1941. Mar 1942. 17p tables (3 fold), diagrs (3 fold) (Text in German) Mi $1.75 Ph $2.50
I. Adipic acid—Synthesis 2. I. G. Farbenindustrie A. G., Ludwigshafen, Ger.

PB 1112s3

Reppe, Julius Walter
Tetrahydrofurane. n.d. 16p (Text in German) Mi $1.75 Ph $2.50
I. Furan, Tetrahydro—Polymers 2. I. G. Farbenindustrie A. G.

PB 93705

Ruppel
Ueber die nitrierversuche zur direkten gewinnung von lackwolle. (I. G. Farbenindustrie. Main Laboratory Report). Jul 1930. 5f Mi $1.25 Enl Pr $2.50

PB 74124s

Schöberl, A. and others.
Papers and patent applications on organic preparations. 1942-1946. 2p Mi $1.25 Ph $1.25
Supplement 1 to PB 74124
Abstracts to Micro FIAT CC 257, Frames 1-174

PB 70326s5t

Schuster (Dr.) and Keller (Dr.)
Experiments to produce acrylic acid and acrylic esters. I. Dec 1939. 11p tables Mi $1.75 Ph $2.50
I. I. G. Farbenindustrie A. G., Ludwigshafen, Ger.

PB 70326s5

Schuster (Dr.) and Keller (Dr.)
Versuche zur darstellung von acrylsäure und acrylsäreester. (III). Jul 1940. 15p tables (Text in German) Mi $1.75 Ph $2.50
I. I. G. Farbenindustrie A. G., Ludwigshafen, Ger.

PB 607s

Schuster, Kurt
Herabsetzung der aktivität von nickel zu kohlenoxyd. (How to decrease the chemical reactivity of nickel towards carbon monoxide). Jan 1940. 2p tables (Text in German) Mi $1.25 Ph $1.25
For translation see PB 607-st
I. Nickel carbonyl—Germany 2. I. G. Farbenindustrie A. G., Ludwigshafen, Ger.

PB 607st

Schuster, Kurt
Herabsetzung der aktivität von nickel zu kohlenoxyd. (How to decrease the chemical reactivity of nickel towards carbon monoxide). Jan 1940. 3p tables Mi $1.25 Ph $1.25
Translation of PB 607s

PB 93357

Spies (Dr.)
Erzeugung von Chloraten durch Einwirkung von Ozon auf Chloride. (Production of chlorates by the action of ozone on chlorides). May 1938. 5p photos (Text in German) Mi $1.25 Ph $1.25
I. Chlorates—Production—Germany 2. I. G. Farbenindustrie A. G., Bitterfeld, Ger.

PB 74950s

Starck, A. G. (Gebruder Borches) Goslar, Ger.
Recipes for inorganic and organic insecticides and information on metallurgical processes 1938-1947. Feb 1947. 6p Mi $1.25 Ph $1.25

PB 93352

Teufelsberger (Herr)
Mikroskopische Untersuchung von Presslingen aus Magnesiumkarbonat und Braunkohle. (Microscopic examination of magnesium carbonate and lignite briquettes). n.d. 4p photos (Text in German) Mi $1.25 Ph $1.25
1. Magnesium carbonates—Germany 2. Lignite—Germany 3. I. G. Farbenindustrie A.G., Bitterfeld, Ger.

PB 27713s5

Trieschmann (Dr.)
Reactions with carbonyl hydrides. 1944. 9p Mi $1.25 Ph $1.25
Supplement 5 to PB 27713
1. Carbonyls, Metal—Germany 2. Hydrides, Metallic—Germany 3. Carbon monoxide—Reactions—Germany

PB 25648s

Weschky (Dr.) and Wolf (Dr.)
Experiments for catalytic production of acrylic esters. Jun 1940. 14p tables Mi $1.75 Ph $2.50
Supplement 1 to PB 25648
1. Acrylic acid—Esters—Germany 2. I. G. Farbenindustrie A. G., Ludwigshafen, Ger.

PB 70326s7

Weschky (Dr.)
Versuche zur katalytischen acrylestersynthese. (II). Jul 1941. 24p drawings, tables (Text in German) Mi $2.00 Ph $3.75

ELECTRICAL MACHINERY, EQUIPMENT, AND SUPPLIES

Communication Equipment

PB 93252

Almquist, H. L.
Study of problems arising from closely grouped antennas. Aug 1945. 152p diagrs, graphs, tables Mi $6.00 Ph $20.00
1. Antennas, Receiving 2. Antennas, Transmitting 3. OSRD 5503 4. NDRC 13-103

PB 93251

Beverage, H. H.
Microwave telephone: Part 1. Omnidirectional. Part 2. Directional. Mar 1943. 13ip photos, diagrs, drawings (1 fold), graphs, tables Mi $5.50 Ph $17.50
1. Telephones, Microwave 2. OSRD 1512 3. NDRC C-42

PB 92782

British Intelligence Objectives Sub-Committee
Funktechnische terminologie. (Radio terminology). n.d. 144p Mi $5.75 Ph $18.75
1. Radio—Dictionaries

PB 92151

Germany. Bevollmächtigte für Hochfrequenzforschung.
Vergleichende betrachtungen zum magnetron mit innen und aussenkathode. (Comparative considerations of magnetrons with interior and exterior cathodes). n.d. 5p Mi $1.00 Ph $1.00
1. Vacuum tubes, Magnetron—Germany

PB 13557s

Lorenz, C., A. G., Berlin
Geratbeschreibung (firmenbeschreibung) horchbildschreiber (H.Bs). (Description of a monitoring facsimile). Dec 1945. 1p Mi $1.25 Ph $1.25
Index to Micro FIAT CC 30, Frames 1-68 (PB 13557)

PB 4677s

Rens, H.
Leerboek der radio-techniek. Speciaal ten dienste van hen, die zich voorbereiden voor de examens voor radio-monteur en radio-technious. Deel II. Radio ontvangtechniek. (Manual of instruction in radio theory, especially for those preparing for examinations as radio mechanics and radio technicians, Pt. II, Radio reception theory). Nov 1945. 1p (Text in Dutch and English) Mi $1.25 Ph $1.25
Index to Micro FIAT CC 19 (PB 4677)

PB 91770

U. S. Air Force.
Douglas: Installation of radio set AN/ARC-3-C47A, B, D, and training versions thereof. Mar 1948. 16p photos, drawings, tables Mi $1.75 Ph $2.50
1. AN/ARC-3 (Radio set) 2. C-47A (Airplane) 3. C-47B (Airplane) 4. C-47D (Airplane) 5. Radio—Installation 6. AAF TO 01-40N-89

PB 91793

U. S. Air Force.
Parts catalog: Amplifier, type A-2. Feb 1948. 11p drawings, tables Mi $1.75 Ph $2.50
1. A-2 (Amplifier) 2. Amplifiers—Parts 3. AAF TO 05-15-61

PB 93127

U. S. War Dept. and U. S. Navy Dept.
Insulating materials: Ceramic radio, class L. Apr 1944. 17p table Mi $1.75 Ph $2.50
1. Insulation, Ceramic

PB 93128

U. S. War Dept. and U. S. Navy Dept.
Insulators: Glass-bonded-mica, radio. May 1944. 11p drawings, tables Mi $1.75 Ph $2.50
1. Insulators, Glass-bonded-mica

PB 90754

Verband Deutscher Elektrotechniker, Berlin
Specifications of cables and wires for telegraphs and telephones. 1940-1944. 55f graphs, tables (Text in German) Mi $2.75 Enl Pr $8.75
For abstract, see PB 90754s ip Mi $1.25 Ph $1.25
1. Cables, Telephone—Specifications—Germany

PB 92925

Zinke, O.
Mindest abstand zwischen sende und empfangsantenne bei aufnahme von antennencharakteristiken. (Minimum distance between receiving and transmitting antennas when recording the radiation characteristics). n.d. 4p graphs Mi $1.25 Ph $1.25
1. Antennas, Receiving—Germany 2. Antennas, Transmitting—Germany 3. Antennas—Radiation—Germany 4. Antennas—Reflectors—Germany

Electronics

PB 91851

Abbott, F. R.
Calibration and standardization of land based radars by the use of small plane targets. Jun 1944. 10p photo, graph Mi $1.25 Ph $1.25
Instructions are given for the siting, construction and utilization of simple plane targets for radar monitoring and calibration.

PB 91852

Abbott, F. R.
Mechanical determination of the path difference of rays subject to discontinuities in the vertical gradient of refractive index. Mar 1944. 4p Mi $1.25 Ph $1.25
An analysis is made of the optical path difference of two nearly horizontal intersecting rays from a common source, passing through an atmosphere whose refractive index is a function only of the altitude. In case the vertical refractive index gradient is constant between discontinuities the path difference may be measured with a planimeter and an engineer's map measure.

PB 82295s

Allgemeine Electrizitäts Gesellschaft A. G., Berlin
Electronics. (Abstract). 1937-1943. 2p Mi $1.25 Ph $1.25
1. Micro FIAT 88 49, Frames 300-371, abstract

PB 91859

Anderson, L. J. and others.
Atmospheric refraction. Preliminary quantitative investigation. Dec 1944. 38p diagrs, map, graphs Mi $2.25 Ph $5.00
The modified index of refraction, in conjunction with ray theory, is a poor criterion for trapping. Strong fields are observed well below the horizon when the observed modified index would indicate that no trapping would be taking place. The vertical distribution of field strength for the lower frequencies appears to have little in common with the fields predicted by ray tracing methods where the energy is assumed to follow the rays. There is no apparent correlation between the experimental data and the simple wave guide analysis. Treating the elevated refracting stratum as a plane reflecting layer seems to agree in general with experience. (a) The observed frequency sensitivity of the reflecting layer is predicted. (b) The observed fading characteristic of the different frequencies is in the right direction; i.e., the higher the frequency the greater the fading. (c) Under conditions of high layers, strong fields well below the horizon cannot be explained on the basis of refraction alone.

PB 91861

Anderson, L. J. and others.
Atmospheric refraction under conditions of a radiation inversion. Apr 1945. 20p diagrs, map, graphs, tables Mi $1.75 Ph $2.50
1. Radio waves—Propagation 2. Radio waves—Atmospheric effects

PB 91863

Anderson, L. J. and others.
Improvement in USNRSL Meteorological sounding equipment. Jul 1945. 22p photos, drawing, graphs Mi $2.00 Ph $3.75
Improvements in design of USNRSL wired sonde equipment since November 1944 are presented. The most important improvement has been in the development of a light weight centrifugal blower unit for supplying forced ventilation of 2.7 knots past the temperature and humidity elements. A re-calibration of the Friez electric hygrometer elements is also presented and applied to a low humidity scale capable of measuring down to 10% relative humidities. A number of other equipment changes as well as a determination of the effects of altitude errors and dynamic corrections for airplane soundings are discussed.

PB 91862

Anderson, L. J. and others.
K-band attenuation due to rainfall. Jun 1945. 20p photos, diagrs, map, graphs Mi $1.75 Ph $2.50
The attenuation of 1.25 centimeter radiation by rain was determined experimentally. A 1.21 statute mile optical CW-link with nine rain gauges equally spaced along the path made it possible to use both uniform and non-uniform rainfall rates in determining the attenuation. If the normal range of a K-Band Radar set is 50 miles, light to moderate rain will reduce this range to about 5 miles. Increasing the power and sensitivity of the equipment will not overcome the effect due to attenuation in rain.

PB 91856

Anderson, Lloyd and Smyth, John B.

Atmospheric refraction. Qualitative investigation. May 1943. 10p graphs Mi $1.25 Ph $1.25

A qualitative correlation is established between the echo intensity received from distant landscape targets and atmospheric gradients. The effectiveness of atmospheric refraction in extending the Radar range beyond the optical horizon is clearly brought out. Short period fluctuations of the echo intensity from distant landscape indicate the presence of local disturbances in the atmospheric gradients.

PB 91857

Anderson, Lloyd and Abbott, F. R.

Graphical construction of a radar radiation pattern in a stratified atmosphere. May 1943. 22p graphs (2 fold), tables Mi $2.00 Ph $3.75

A graphical method is presented for the approximate solution of a Radar radiation pattern over the ocean under conditions of pronounced and variable atmospheric refraction.

PB 92154

Germany. Bevollmächtigte fur Hochfrequenzforschung.

Stoersende-araiage. (Jammer transmitter installation). n.d. 7p photos, drawing Mi $1.25 Ph $1.25

1. Jamming transmitters—Germany

PB 93621

Guerlac, Henry E.

Radar in world war II. May 1947. (Illustrations to accompany text). MS c. 1, pts 1-3, chap. 1-40, 108p photos, diagrs, drawings Mi ~~$4.50~~ $3.25 Ph ~~$13.75~~ $9.75

1. Massachusetts Institute of Technology. Radiation Laboratory. See errata sheet, v.11, #2.

PB 93618

Guerlac, Henry E.

Radar in world war II. May 1947. MS c.1, pt. 1, chap. 1-10. 425p Mi $9.00 Ph $53.75

Appendix B: Glossary of terms used in connection with Radiation laboratory radar

1. Radar—Research 2. Radar—Systems 3. Radar—History 4. Massachusetts Institute of Technology. Radiation Laboratory

PB 93619

Guerlac, Henry E.

Radar in world war II. May 1947. MS c.1, pt. 2, chap. 11-23. 434p Mi $9.00 Ph $55.00

1. Massachusetts Institute of Technology. Radiation Laboratory

PB 93620

Guerlac, Henry E.

Radar in world war II. May 1947. MS c.1, pt. 3, chap. 24-40. 346p Mi $9.00 Ph $43.75

1. Massachusetts Institute of Technology. Radiation Laboratory

PB 92152

Peters, J.

Vorschlag für verfahren von bodenbetrachtungsgeraeten. (Suggestions for a method of jamming radar ground observation sets). n.d. 13p drawings, graph, tables Mi $1.75 Ph $2.50

1. Radar—Jamming—Germany 2. Germany. Bevollmächtigte für Hochfrequenzforschung.

PB 73698s

Rahr, Kurt

Prinzip eines neuen fernseh-verfahrens. (Principle of a new television process). Apr 1946. 2p (Text in English) Mi $1.25 Ph $1.25

1. Micro FIAT CC 260, Frames 1-6, abstract

PB 73501s

Rundfunktechniache Zentrolstelle, Bad Homburg, Ger.

Amplifier circuits and parts lists. 1945. 2p Mi $1.25 Ph $1.25

1. Micro FIAT CC 165, Frames 1-10, abstract

PB 73545s2

Schroeter, F., Heidenheim a.d. Brenz, Ger.

Electronics. 1945-1946. 4p Mi $1.25 Ph $1.25

1. Micro FIAT CC 164, Frames 1-57, abstract

PB 91860

Smyth, J. B. and Trolese, L. G.

Atmospheric waves. Fluctuations in high frequency radio waves. Feb 1945. 12p graphs Mi $1.75 Ph $2.50

1. Radio waves—Propagation 2. Waves, Electromagnetic—Diffraction 3. Radio waves—Atmospheric effects

PB 91850

Smyth, John B.

Transmission of plane waves through a single stratum separating two media—Part II. Jun 1944. 20p graphs Mi $1.75 Ph $2.50

The transmission of plane waves through a non-homogeneous stratum separating two media is investigated. The index of refraction and its first derivation are continuous functions of the altitude. It is shown that the energy only partially follows the rays when the radiation is incident upon the stratum at angles near the critical angle. For the case where the modified refractive index passes through a minimum in the stratum the propagation of energy may be quite different from that given by ray density. It is further shown that a reflection ratio of 1.0 from the stratum is a condition necessarily imposed when the usual elementary wave guide theory is used to explain transmission in the trapping region. An equation is derived which gives the attenuation of the trapped energy along the trapping layer as a function of the heights of the transmitter and refracting layer, the angle at which the radiation is incident upon the stratum, the ratio of the stratum thickness to wave length,

and the refractive index variation through the refracting layer.

PB 91864

Stephenson, S. T.

Some measurements of humidity, temperature and refractive index gradients immediately above the ocean. Sep 1945. 14p graphs, tables Mi $1.75 Ph $2.50

I. Humidity—Measurements 2. Radio waves—Refraction 3. Temperature—Measurements

PB 73489s2

Süddeutsche Apparate-Fabrik, G.m.b.H., Nürnberg, Ger.

Selenium rectifiers. 1936-1945. 4p Mi $1.25 Ph $1.25

I. Micro FIAT AA 168, Frames 1-285, abstract

PB 74363s

Telefunken-Gesellschaft für Drahtlose Telegraphie m.b.H., Berlin.

Laboratory reports on research in vacuum tubes. 1941-1945. 5p Mi $1.25 Ph $1.25

I. Micro FIAT GB 7, Frames 2690-3265, abstract

PB 91790

U. S. Air Force

Radio, radar and electronics spare parts list. Radio transmitters BC-640-A and BC-640-B. Feb 1948. 18p tables Mi $1.75 Ph $2.50

I. BC-640-A (Radio transmitter) 2. BC-640-B (Radio transmitter) 3. Radio—Components 4. Radio transmitters—Parts 5. AAF TO 16-55-307

PB 66099s2

U. S. Army Air Forces.

General: Replacement of all fixed wire antennas with antenna assembly AS-315/A-B-29, B-29A, B-29B, C-46D, C-46F, C-47 series, C-54,C-54A, C-54B, C-54D C-54E,C-54G,C-69,C-74,C-82A,C-117A,F-13, and F-13A (and training versions of the above models). Jul 1947. 2p drawing Mi $1.25 Ph $1.25

I. AAF TO 01-1-281B

PB 93303

U. S. Air Force and U. S. Navy Dept.

General specification for electronic equipment. Air Force-Navy aeronautical specification. Jun 1948. 46p graphs, tables Mi $2.50 Ph $6.25

I. Electronic equipment—Specifications

PB 91791r

U. S. Air Force and U. S. Navy Dept.

Handbook: Maintenance instructions, radar sets AN/APQ-23 and AN/APQ-23A. Feb 1948. 42p Mi $2.50 Ph $6.25

I. AN/APQ-23 (Radar set) 2. AN/APQ-23A (Radar set) 3. Radar equipment—Parts

PB 93306

U. S. Air Force and U. S. Navy Dept.

Interference limits and tests: General electronic equipment. Air Force-Navy aeronautical specifications. May 1948. 7p graph, tables Mi $1.25 Ph $1.25

I. Electronic equipment—Specifications

PB 91789

U. S. Air Force.

Radio, radar and electronics spare parts list. Radio set AN/MPN-1C. Jan 1948. 84p tables Mi $3.75 Ph $11.25

I. Radio—Components 2. AAF TO 16-55-267

PB 92924

U. S. Camp Evans Signal Laboratory.

Cavity resonators for millimeter waves. n.d. 27p drawings, graph, tables Mi $2.00 Ph $3.75

I. Resonators, Cavity—Oscillations—Germany 2. Waves, Electric—Germany

PB 92926

U. S. Camp Evans Signal Laboratory.

Untersuchungen ueber die stoerung von bodenbetrachtungsgeraeten. (Research on the jamming of ground observation sets): Preliminary laboratory report. n.d. 10p photos Mi $1.25 Ph $1.25

I. Jamming transmitters—Germany 2. Radar—Jamming—Germany

PB 92923

U. S. Camp Evans Signal Laboratory.

Vorversuche zur frage der indirekten stoerung von bodenbetrachtungsgeraeten. (Preliminary research on the indirect jamming of ground observation sets). n.d. 6p photos Mi $1.25 Ph $1.25

I. Jamming transmitters—Germany 2. Radar—Jamming—Germany

PB 91848

Whittemore, L. L. and others.

Predicted low level coverage of 200 MCS band shipborne radars as affected by weather. Horizontal polarization. Antenna height 100 feet. Nov 1944. 19p graphs, table Mi $1.75 Ph $2.50

I. Radar—Bands 2. Radar—Meteorological effects 3. Radio waves—Propagation

PB 91849

Whittemore, L. L. and others.

Predicted low level coverage of S-band shipborne radars as affected by weather. Horizontal polarization. Antenna height 100 feet. Nov 1944. 19p graphs, table Mi $1.75 Ph $2.50

I. Radio waves—Propagation 2. Radar—Bands, S 3. Radar—Meteorological effects

PB 74098s

Wurzburg, Heinrich Ott

1. On the reflecting power of media arranged in layers. 2. Interesting case of herschel effect on silver bromide paper under infra red. (Abstract). 1943. 1p Mi $1.25 Ph $1.25

I. Micro FIAT CC 278, Frames 1-13, abstract

Generators, Motors, Transmission, Distribution, and Allied Equipment

PB 90743

Allgemeine Elektrizitäts Gesellschaft A. G., Berlin

Automatic circuit breakers. 1940. 16f photos, diagrs, tables (Text in German) Mi $1.75 Enl Pr $3.75

See also Micro BIOS 4997/45 (PB 91366)

For abstract, see 90743s 1p Mi $1.25 Ph $1.25

I. Circuit breakers—Germany

PB 74314s

Allgemeine Elektricitats Gesellschaft A.G., Berlin.

Reports on d-c high-voltage power transmission and on capacitors. 1942-1946. 2p Mi $1.25 Ph $1.25

I. Micro FIAT GG 35, Frames 623-940, abstract

PB 92323

Koppelmann, F.

Method for measuring approximately rectangular high-speed magnetization loops of ring cores. 1944. 35p diagrs, graphs Mi $2.25 Ph $5.00

I. Loops, Magnetic—Germany 2. Magnetic measurements—Germany 3. Transformers—Cores—Germany

PB 73701s2

Siemens-Schuckertwerke A. G., Berlin.

D-C motors for hoists and wind tunnel propellers. 1936-1944. 2p Mi $1.25 Ph $1.25

I. Micro FIAT J 214, Frames 1-436, abstract

PB 73384s

Siemens-Schuckertwerke A. G., Berlin.

Structural calculations of wood and steel masts for power transmission and distribution. 1940-1941. 2p Mi $1.25 Ph $1.25

I. Micro FIAT CC 231, Frames 644-754, abstract

PB 70366s

Steuerung eines polumschaltbaren drehstrommotors (Control of a pole-changing three-phase motor). Nov 1946. 2p Mi $1.25 Ph $1.25

I. Micro FIAT AA 238, Frames 1-5, abstract

PB 93319

U. S. Air Force and U. S. Navy Dept.

Base assembly: Voltage regulator. Air Force-Navy aeronautical standard. Jun 1948. 1p Mi $1.25 Ph $1.25

I. Voltage regulators—Specifications

PB 93318

U. S. Air Force and U. S. Navy Dept.

Generator: Tachometer, four pole. Air Force-Navy aeronautical standard. Jun 1948. 1p drawings Mi $1.25 Ph $1.25

I. Generators, Tachometer—Specifications

PB 52381s

Weisse, Erwin.

Technische halbleiter-widerstaende. (Technical application of semi-conductor resistances.) 1942. 2p Mi $1.25 Ph $1.25

I. Micro FIAT CC 138, Frames 1-156, abstract

Miscellaneous

PB 90745

Allgemeine Elektrizitäts Gesellschaft A. G., Berlin

Precision resistance bridges. n.d. 5f diagrs, photos, tables (Text in German) Mi $1.25 Enl Pr $2.50

For abstract see PB 90745s 1p Mi $1.25 Ph $1.25

I. Bridges, Resistance—Germany 2. Wheatstone bridge—Germany

PB 74333s

Allgemeine Elektrizitäts Gesellschaft A.G., Berlin.

Reports on the activities of the AEG Research Laboratories. (Abstract). 1932-1944. 2p Mi $1.25 Ph $1.25

I. Micro FIAT GG 43, Frames 1380-1671, abstract

PB 90746

Allgemeine Elektrizitäts Gesellschaft A. G., Berlin

Small-size electric welding set and pliers. n.d. 10f photos (Text in German) Mi $1.25 Enl Pr $2.50

See also Micro BIOS FD 4997/45 (PB 91366)

For abstract, see PB 90746s 1p Mi $1.25 Ph $1.25

I. Welding—Equipment—Germany

PB 93485

Barber, W. J. and others.

The German ceramic industry with special reference to domestic electrical accessories. Nov 1946. 152p photos Mi $6.00 Ph $20.00

I. Ceramic Industries—Germany

PB 91919

Burden, W. D. and others.

Tests of shark repellents, Gulf of Guayaquil. Abstract. Bimonthly progress reports 3-7, Nov 30, 1942—Jun 28, 1943. 1942-1943. 47p tables Mi $2.50 Ph $6.25

A series of progress reports, nos. 3-7, outlining the methods used and locality of the tests. Tables summarize the results of the more effective substances.

PB 92922

Cashell, C. F. and Taylor, P. E.

Ultraviolet autocollimating reflector units. Final report. May 1944. 20p photos Mi $1.75 Ph $2.50

I. Reflectors, Autocollimating

PB 93663

Farley, F. J. M. and Gove, H. E.

An inverse feedback D. C. amplifier. Aug 1946. 19p diagrs Mi $1.75 Ph $2.50

This paper describes a D.C. amplifier with a gain of 4000 and an input grid leakage current of 10^{-12} amperes, having short term variations referred to the input of 0.5 millivolts and long term variations or drift of 5 millivolts per hour referred to the input; with a low impedance output that can be adjusted to ground potential when the input is grounded, capable of feeding a recording milliameter.

PB 73696s

Kuhlmann (Dr.)

Fortschritte auf dem gebiet der graphitierung von electroden. (Progress in the field of graphitizing electrodes). Mar 1947. 2p Mi $1.25 Ph $1.25

I. Micro FIAT CC 250, Frames 1-2, abstract

PB 91918

Long, Louis, (Jr.)

Synthesis of E. Monthly progress reports 1-5, Mar 1, 1942—July 1, 1942. Mar-Jul 1942. 7p Mi $1.25 Ph $1.25

A series of five monthly progress reports on the synthesis of E. This investigation covers the oxidative degradation of the side-chain of desoxycholic acid.

PB 93353

Mara (Dr.)

Übermikroskopische Untersuchung sublimierter Molybdänsäure. (Electronmicroscopic examination of sublimated molybdic acid). Mar 1944. 3p photos (Text in German) Mi $1.25 Ph $1.25

I. Molybdic acids—Electronmicroscopic examination—Germany 2. I. G. Farbenindustrie A. G., Bitterfeld, Ger.

PB 92153

Rensch, Heinz

Einfuss von nahfeldbeugungserschiemung an parabol-spelgeln bei bestimmung der strahlungscharakteristik. (Influence of near-field phenomena of parabolic reflectors when determining the reflection characteristic). n.d. 10p graphs Mi $1.25 Ph $1.25

I. Reflectors, Parabolic—Germany 2. Germany. Bevollmächtigte für Hochfrequenzforschung.

PB 92832

Rosenthal, L.

Research-measurement of power dissipation temperature rise characteristics of various crystals. Final report, April 15 1946—July 15, 1947. n.d. 79p drawings, graphs, tables Mi $3.50 Ph $10.00

For quarterly report no. 1, July 1, 1947—September 15, 1947, see PB 92832s 36p Mi $2.25 Ph $5.00

For quarterly report no. 2, September 15, 1947—December 15, 1947, see PB 92832s2 38p Mi $2.25 Ph $5.00

I. Crystals—Characteristics 2. Crystals—Research 3. Rutgers University. Department of Electrical Engineering

PB 93336

Schwartz, Robert and Strauss, Simon.

Crystals: Study of the methods of preparation and the properties of compounds with defect lattices. Apr 1948. 24p graph, tables Mi $2.00 Ph $3.75

I. Crystals—Lattices 2. Polytechnic Institute of Brooklyn, Brooklyn, N. Y.

PB 90740

Siemens & Halske A. G., Berlin

Small welding sets and accessories. 1939. 21f photos, diagrs, tables (Text in German) Mi $2.00 Enl Pr $5.00

For abstract, see PB 90740s 1p Mi $1.25 Ph $1.25

I. Welding—Equipment—Germany 2. Catalogs, Commercial—Germany

PB 90748

Siemens & Halske A. G., Berlin

Standard parts for electrical equipment. 1938-1940. 333f diagrs, tables (Text in German) Mi $9.00 Enl Pr $45.00

For abstract, see PB 90748s 1p Mi $1.25 Ph $1.25

I. Electrical equipment—Germany

PB 26285r2

U. S. Air Force and U. S. Navy Dept.

Clamp: Battery hold-down. Air Force-Navy aeronautical standard. Mar 1948. 1p drawings Mi $1.25 Ph $1.25

PB 21293r

U. S. Air Force and U. S. Navy Dept.

Compound: Insulating and sealing, electrical connections. Air Force-Navy aeronautical specification. Apr 1948. 10p drawings, table Mi $1.25 Ph $1.25

PB 92813

U. S. Air Force and U. S. Navy Dept.

Connectors: Electrical. Air Force-Navy aeronautical bulletin. Apr 1948. 1p Mi $1.25 Ph $1.25

PB 93325

U. S. Air Force and U. S. Navy Dept.
Fuse: Hydraulic quantity measuring class 3000 type I. Air Force-Navy aeronautical standard. Jun 1948. Ip drawing, table Mi $1.25 Ph $1.25
I. Fuzes, Hydraulic—Specifications

PB 93321

U. S. Air Force and U. S. Navy Dept.
Fuse: Hydraulic quantity measuring. Class 3000 type II. Air Force-Navy aeronautical standard. Jun 1948. Ip drawings, table Mi $1.25 Ph $1.25
I. Fuzes, Hydraulic—Specifications

PB 80774a

U. S. Air Force and U. S. Navy Dept.
Fuses: Automatic quantity measuring hydraulic. Air Force-Navy aeronautical specification. Jun 1948. 5p drawings Mi $1.25 Ph $1.25

PB 21453r

U. S. Air Force and U. S. Navy Dept.
Inverters: Rotary. Air Force-Navy aeronautical specification. Jul 1948. 22p tables Mi $2.00 Ph $3.75

PB 93602

U. S. Air Force and U. S. Navy Dept.
Probe-high frequency electro-magnetic. Air Force-Navy aeronautical standard. Jun 1948. Ip drawing Mi $1.25 Ph $1.25
I. Probes, Electromagnetic

PB 92978

U. S. Air Force and U. S. Navy Dept.
Receptacle and cable: External power connection, 28 volt D.C. Air Force-Navy aeronautical specification. Apr 1948. 8p Mi $1.25 Ph $1.25
I. Connections, Electric 2. Cables, Electric

PB 88263r

U. S. Air Force and U. S. Navy Dept.
Switch assemblies and actuators: Push button and limit. Air Force-Navy aeronautical bulletin. Apr 1948. 2p Mi $1.25 Ph $1.25
I. Switches 2. Actuators

PB 93323

U. S. Air Force and U. S. Navy Dept.
Switch assembly: Toggle, momentary position, two unit. Air Force-Navy aeronautical standard. Jun 1948. Ip drawings, table Mi $1.25 Ph $1.25
I. Switches, Toggle—Specifications

PB 26175r5

U. S. Air Force and U. S. Navy Dept.
Switch-toggle: Double pole, three hole mounting. Air Force-Navy aeronautical standard. Jun 1948. Ip drawings, table Mi $1.25 Ph $1.25

PB 93313

U. S. Air Force and U. S. Navy Dept.
Switches: Generator control relay (differential). Air Force-Navy aeronautical bulletin. Jun 1948. Ip table Mi $1.25 Ph $1.25
I. Switches, Differential—Specifications

PB 93125

U. S. War Dept. and U. S. Navy Dept.
Crystal-units: CR-1( )AR. Oct 1945. 26p drawings, graphs, tables Mi $2.00 Ph $3.75
I. Oscillators, Crystal

PB 53245r

U. S. War Dept. and U. S. Navy Dept.
Crystal-units, CR-5/U. Jul 1947. 23p Mi $2.00 Ph $3.75

PB 93122

U. S. War Dept. and U. S. Navy Dept.
Treatment: Moisture- and fungus-resistant, of communications, electronic, and associated electrical equipment: General process for. Jan 1947. 11p Mi $1.75 Ph $2.50
I. Coatings, Fungicidal 2. Coatings, Water repellent

PB 93121

U. S. War Dept. and U. S. Navy Dept.
Wave-guide-assemblies: Flexible. Jan 1946. 20p tables Mi $1.75 Ph $2.50
I. Wave guides, Flexible

FOOD AND KINDRED PRODUCTS

PB 93260

Frantz, John A.
Survival ration, Alaskan field trial. May 1948. 53p photos, tables Mi $2.75 Ph $7.50
I. Food rations, Emergency

PB 93283

Fukaya, M.
On the factor inducing the dormancy of the rice borer, Chilo Simplex butler. n.d. 5p tables Mi $1.25 Ph $1.25
I. Rice—Diseases and pests—Japan 2. Rice bug—Japan 3. Ohara Institute for Agricultural Research, Kurashiki, Japan

PB 93292

Iijima, Kanae
Influence of high temperature on the sterility of gray moth borer of sugar cane. n.d. 8p tables Mi $1.25 Ph $1.25
I. Sugar cane borer—Japan 2. Japan. Ministry of Agriculture and Forestry

PB 93301

Ishikura, Hidetsugu
Control of Oriental Rice Borer by blue fluorescent light trap. n.d. 13p tables Mi $1.75 Ph $2.50

1. Rice—Diseases and pests—Japan 2. Insect control—Japan 3. Insects—Eradication—Japan 4. Rice moth—Japan 5. Japan. Ministry of Agriculture and Forestry

PB 93293

Kato, Mutsuo

Ecological investigation concerning the environmental climatic condition of the rice leafminer, agromyza oryzelia matsumura. n.d. 4p table Mi $1.25 Ph $1.25

1. Rice—Diseases and pests—Japan 2. Leaf miners—Japan 3. Tohuku Imperial University. Biological Institute, Sendai, Japan

PB 93294

Kuwayama, Satoru

The rice leaf-miner: Some observations on its ecology and experiments along the control measures. n.d. 18p photos, graph, tables Mi $1.75 Ph $2.50

1. Rice—Diseases and pests—Japan 2. Leaf miners—Japan 3. Hokkaido Noji Shikenjo Hokoku (Hokkaido Experiment Station)

PB 88808

Pogacar, Peter

Separation of ferments using substrate combinations. n.d. 17p tables (Text in English and German) Mimeo: $.50

1. Enzymes—Research—Germany 2. Enzymes—Isolation—Germany 3. FIAT FR 1201

PB 93295

Sonan, Jinhaku

On the hymenopterous parasites of the tea-leaf-rollers found in Japan and Formosa. n.d. 16p photos Mi $1.75 Ph $2.50

1. Tea—Diseases and pests—Japan 2. Hymenoptera—Parasites—Japan 3. Tea—Diseases and pests—Formosa 4. Hymenoptera—Parasites—Formosa 5. Tea Experiment Station, Kanaya, Japan

PB 87208r

Supreme Commander for the Allied Powers, Natural Resources Section.

Japanese fisheries production, 1908-46. 1946. 2p tables Mi $1.25 Ph $1.25

PB 93296

Tsutsui, Kiyoji

Studies on the wheat midge, sitodiplosis mosellana gehin, in Japan. n.d. 2p map Mi $1.25 Ph $1.25

1. Wheat midge—Japan 2. Wheat—Diseases and pests 3. Japan. Ministry of Agriculture and Forestry

PB 93297

Yuasa, Hiroharu

Resistance in rice plant to rice stem maggot. n.d. 10p diagr Mi $1.25 Ph $1.25

1. Rice—Diseases and pests—Japan 2. Japan. Ministry of Agriculture and Forestry

FUELS AND LUBRICANTS

PB 44708

Allen, J. G.

Changes in tentative scheme for operation of the German oil refineries, based on the use of German crude oil. Oct 1945. 2p Mi $1.25 Ph $1.25

1. Oil refineries—Germany 2. FIAT FR 427, Supp

PB 92874

Bartelsen (Herr)

Test report no. L 28 on A 1,438, experiments with low combustion chamber pressure. System T—fuel, Z—fuel, petrol with bertolin preliminary running. Apr 1942. 6p tables Mi $1.25 Ph $1.25

1. Combustion chambers—Thermal measurements—Germany 2. Combustion—Temperature—Germany 3. Fuels—Combustion—Germany 4. Walther Werke, Kiel, Ger.

PB 91490

Braunkohle-Benzin A. G., Zeitz, Ger.

Flow and data sheets relating to benzine distillation. 1935-1945. 121f diagrs, graphs, tables (Text in German) Mi $5.00 Enl Pr $17.50

For abstract, see PB 91490s 1p Mi $1.25 Ph $1.25

1. Gasoline—Distillation—Germany

PB 92408

Brookman, J. G. and Ham, R. B.

Influence of temperature on the lubricating properties of cutting fluids. Oct 1941. 12p photos, graphs (2 fold), table Mi $1.75 Ph $2.50

1. Cutting fluids—Australia

PB 92407

Brookman, J. G. and Kelly, N. J.

Influence of temperature on the lubricating properties of cutting fluids. Nov 1941. 12p photos, graphs, fold table Mi $1.75 Ph $2.50

1. Cutting fluids—Australia 2. Lubricating oils—Additives—Australia

PB 92367

Courtney-Pratt, J. S., and Yoffe, A.

Temperature control of lubricating oil. Thermostat bellows for Beaufort engines. Feb 1942. 6p photo, tables Mi $1.25 Ph $1.25

1. Bellows, Thermostat—Australia

PB 92373

Courtney-Pratt, J. S. and Yoffe, A.

Temperature control of lubricating oil. Thermostat bellows for Beaufort engines over the range 130°-150° F. Jun 1942. 5p tables Mi $1.25 Ph $1.25

1. Bellows, Thermostat—Australia

PB 92390

Eirich, F. R. and Tabor, D.

Collisions through liquid layers. Mar 1945. 35p diagrs, graphs, tables Mi $2.25 Ph $5.00
1. Films, Lubricant 2. Explosions—Theory 3. Flow, Compressible—Australia

PB 91358

Germany. Reichsamt für Wirtschaftsausbau.

Experiments with various iron catalysts for the synthesis of liquid fuel. 1943. 141f diagrs, tables (Text in German) Mi $5.75 Enl Pr $20.00
For abstract, see PB 91358s 2p Mi $1.25 Ph $1.25
1. Catalysts, Iron—Germany 2. Fischer-Tropsch process 3. Catalysts, Hydrogenation—Germany

PB 92401

Greenhill, E. B. and Tabor, D.

Use of soaps as lubricants in the drawing of brass shell cases. May 1943. 7p graphs, tables Mi $1.25 Ph $1.25
1. Lubricants—Tests—Australia

PB 92416

Gregory, J. N.

Effect of selenium compounds on the lubricating properties of mineral oil at high temperatures and high pressures. Jul 1942. 16p photos, graphs, tables Mi $1.75 Ph $2.50
1. Mineral oils—Australia 2. Lubricating oils—Additives—Australia 3. Selenium compounds—Australia

PB 93498

Hall, C. C. and Craxford, S. R.

Additional information concerning the Fischer-Tropsch process and its products. Jul 1946. 203p drawings, graphs, tables, diagrs Mi $7.50 Ph $26.25
1. Fischer-Tropsch process—Germany 2. Catalysts, Hydrogenation—Germany 3. BIOS FR 1722, Item 22

PB 81691s

I. G. Farbenindustrie A. G.

Catalytic cracking of liquid fuels. 1937-1943. 7p (Text in German and English) Mi $1.25 Ph $1.25

Index to Micro FIAT LF 39 and Tom 141, Frames 1-446 (PB 81691)

PB 20860s

I. G. Farbenindustrie A. G.

File of Dr. Simon. Papers on hydrogenation, aromatization and paraffin oxidation. Jan 1946. 13p (Text in German and English) Mi $1.75 Ph $2.50

Index to Micro FIAT LF 99, Frames 1-782 (PB 20860) and Micro TOM 201, Frames 1-782 (PB 20860)

PB 20861s

I. G. Farbenindustrie A. G.

Files of Dr. Günther, of Dr. Pier's staff at Ludwigshafen, on various hydrogenation topics. Feb 1946. 9p (Text in German and English) Mi $1.25 Ph $1.25

Index to Micro FIAT LF 124, Frames 1-661 (PB 20861) and Micro TOM 202, Frames 1-661 (PB 20861)

PB 20852s

I. G. Farbenindustrie A. G.

Lectures by Dr. Pier, reports on experimental work on hydrogenation in the sump phase; reports on experimental work in the sump phase. Feb 1946. 14p (Text in German and English) Mi $1.75 Ph $2.50

Index to Micro FIAT LF 125, Frames 1-1377 (PB 20852) and Micro TOM 203, Frames 1-1377 (PB 20852)

PB 17664s

I. G. Farbenindustrie A. G.

Papers and reports on various researches and processes of the Hochdruckversuche Laboratories, and Butan-Tanol plant data. Jan 1946. 10p (Text in German and English) Mi $1.25 Ph $1.25

Index to Micro FIAT LF 67, Frames 1-967 (PB 17664) and Micro TOM 165, Frames 1-967 (PB 17664)

PB 17665s

I. G. Farbenindustrie A. G.

Papers on various experiments and processes, Hochdruckversuche Laboratories and Hydrierwerk Scholven. Jan 1946. 10p (Text in German and English) Mi $1.25 Ph $1.25

Index to Micro FIAT LF 68, Frames 1-868 (PB 17665) and Micro TOM 166, Frames 1-868 (PB 17665)

PB 19931s

I. G. Farbenindustrie A. G.

Papers, reports and drawings on manufacture of synthetic oils and fuels. Feb 1946. 15p (Text in German and English) Mi $1.75 Ph $2.50

Index to Micro FIAT LF 116, Frames 1-953 (PB 19931) and Micro TOM 174, Frames 1-953 (PB 19931)

PB 17685s

I. G. Farbenindustrie A. G.

Reports of research on various oil processes, Hochdruckversuche Laboratories. Jan 1946. 6p (Text in German and English) Mi $1.25 Ph $1.25

Index to Micro FIAT LF 103, Frames 1-748 (PB 17685) and Micro Tom 170, Frames 1-748 (PB 17685)

PB 91364

I. G. Farbenindustrie A. G., Merseburg, Ammonia Works, Ger.

Annual reports. 1941-1943. 166f Mi $6.25 Enl Pr $22.50

For abstract, see PB 91364s 21p Mi $2.00 Ph $3.75

1. Fuels, Synthetic—Production—Germany 2. Methanol—Germany 3. Isobubyl—Germany 4. Micro BIOS FD 4975a/45, Frames 1-132

PB 91489

Koppers, Heinrich G.m.b.H., Essen, Ger.
Notes, correspondence, and flow sheets on gasification. 1933-1943. 44f tables Mi $2.50 Enl Pr $7.50
For abstract, see PB 91489a 2p Mi $1.25 Ph $1.25
1. Coal dust—Germany 2. Gasification—Germany

PB 92394

Moore, A. J. W. and Tabor, D.
Deep drawing steel cups with lead film as lubricant. Dec 1943. 5p tables Mi $1.25 Ph $1.25
1. Tabor, D. 2. Lubricants—Tests—Australia 3. Films, Lubricant—Australia 4. Metals-- Friction—Australia

PB 18852s11

Niemann (Herr)
Acetylenverbrauch. Dec 1941. 3p tables Mi $1.25 Ph $1.25
1. Acetylene—Uses—Germany 2. I. G. Farbenindustrie A. G., Ludwigshafen, Ger.

PB 92393

Peart, J. and Tabor, D.
Lubricating properties of soaps used in the drawing of ferrous materials. Effect of changing composition and method of application. Mar 1944. 13p tables Mi $1.75 Ph $2.50
1. Lubricants—Tests—Australia 2. Films, Lubricant—Australia 3. Metals—Drawing—Australia 4. Soaps—Australia

PB 93491

Petty, D. S. and others.
Fundamental work on combustion in Germany. n.d. 171p tables, graphs Mi $6.50 Ph $22.50
1. Combustion—Research—Germany 2. Combustion—Theory—Germany 3. BIOS FR 1612, Item 19

PB 88839r

Sherwood, Peter W.
High pressure hydrogenation in Germany. 1. The liquid phase. May 1947. 251p diagrs, drawings (3 fold). graphs, tables Mimeo: $6.25
Revision 1 of PB 88839
Appendix 4 in German
1. I. G. Farbenindustrie A. G., Ludwigshafen, Ger. 2. FIAT FR 952-1

PB 92411

Swaine, D. J.
Fluids for the grinding and cutting of glass. Jun 1942. 5p Mi $1.25 Ph $1.25
1. Cutting fluids—Australia

PB 92381

Tabor, D.
Development of an improved lubricant for the drawing of brass shell cases. Aug 1942. 15p photos, graphs, tables Mi $1.75 Ph $2.50
1. Lubricants—Tests—Australia

PB 49048a3

U. S. Air Force and U. S. Navy Dept.
Fuel: Aircraft reciprocating engine. Air Force-Navy aeronautical specification. Jul 1948. 2p tables Mi $1.25 Ph $1.25

PB 21408r

U. S. Air Force and U. S. Navy Dept.
Grease: Lubricating graphite. Air Force-Navy aeronautical specification. Feb 1948. 18p drawings Mi $1.75 Ph $2.50

PB 21408s

U. S. Air Force and U. S. Navy Dept.
Grease: Lubricating graphite. Air Force-Navy aeronautical bulletin. Apr 1948. 1p table Mi $1.25 Ph $1.25

PB 21494a3

U. S. Air Force and U. S. Navy Dept.
Lubrication of aircraft: General specification for. Air Force-Navy aeronautical specification. Mar 1948. 2p table Mi $1.25 Ph $1.25

PB 92812

U. S. Air Force and U. S. Navy Dept.
Oil: Jet engine. Air Force-Navy aeronautical bulletin. May 1948. 2p Mi $1.25 Ph $1.25
1. Oils—Specifications

PB 21537a

U. S. Air Force and U. S. Navy Dept.
Oil: Low temperature lubricating gear. Air Force-Navy aeronautical bulletin. Apr 1948. 3p table Mi $1.25 Ph $1.25

PB 21539a

U. S. Air Force and U. S. Navy Dept.
Oil: Preservative, hydraulic equipment. Air Force-Navy aeronautical specification. Jun 1948. 4p tables Mi $1.25 Ph $1.25

Highways and Bridges

PB 90749

A. G. der Kohlenwertstoff-Verbände. Verkaufs-Vereinigung für Teererzeugnisse (V.f.T), Essen, Ger.
Tar for road making. 1932. 4f drawing (Text in German) Mi $1.25 Enl Pr $2.50
For abstract, see PB 90749a 1p Mi $1.25 Ph $1.25
1. Tar—Uses—Germany

INSTRUMENTS

PB 93497

Bigg, P. H.

German fine balance industry. May 1947. 15p Mi $1.75 Ph $2.50

I. Balances—Germany 2. Weights and measures—Germany 3. Bunge, Paul, A. G., Hamburg, Ger. 4. BIOS FR 1689, Item 9

PB 93329

Benzinger, Theodor H. and Kitzinger, Charlotte.

Method for continuous recording of gas composition by means of an interferometer. May 1948. 13p drawings, graphs Mi $1.75 Ph $2.50

I. Interferometers 2. Gas analyses—Instruments

PB 93471

Brand, J. R. and others.

The four-fold hand counter. Nov 1944. 12p diagrs Mi $1.75 Ph $2.50 (Limited supply available mimeo $.10) (Also available from U. S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo $.10)

The four-fold hand counter is designed for the rapid determination of beta and gamma contamination of the hands. Its main advantages over previous instruments are: (1) it checks the contamination of both sides of both hands simultaneously, (2) it obtains improved geometry by the use of two G-M counters for each side of each hand, (3) its operation is simple and automatic so that no operator is required, and (4) it reduces the chance of human error by means of automatic timing, A general physical description, a description of circuit operation, installation and service details, parts list, and diagrams of the instrument are included.

PB 92839

Deutsche Waffen- und Munitionsfabriken A. G., Luebeck, Ger.

Report on experiences with the measuring of velocities with the coil-boulenge. Oct 1944. 14p drawing, tables Mi $1.75 Ph $2.50

I. Velocity—Measurements—Germany 2. Coil-Boulenge (Meter) 3. Velocimeters—Germany

PB 93488

Griffiths, Ezer (Dr.) and others.

Thermal measuring instruments. Thermostats and associated apparatus. Dec 1946. 57p diagrs Mi $2.75 Ph $7.50

I. Instruments, Measuring—Thermo-technical—Germany 2. Thermostats—Germany 3. Thermal measurements—Germany 4. BIOS FR 1672, Item 9

PB 92321

Guyot, E.

Problem of time-keeping; Accurate time—time measuring devices. Jul-Aug 1946. 18p drawings, tables Mi $1.75 Ph $2.50

I. Pendulums 2. Clocks, Pendulum 3. Clocks, Synchronous

PB 93462

Higinbotham, W. A.

Oscilloscope sweep circuit and delay line for the study of transients. Jun 1944. 6p diagrs Mi $1.25 Ph $1.25 (Limited supply available mimeo $.10) (Also available from U. S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo $.10)

I. MDDC 1212 A description and operational instructions are given for a chassis (13" x 17" x 3" with 8-3/4" panel) which contains the following circuits: a trigger circuit giving repetition rates from 10 to 10,000 cycles; a triggered sweep with speeds from .5 microsec to .03 sec per inch, when used with a 5" cathode ray tube and accelerating voltage of about 1500 volts; a 1.2 microsec delay line with driving tube and one stage amplifier; power supply. The sweep speeds cover a wide range for general laboratory use. The sweep circuit is especially designed to give reliable operation on random pulsing. Circuit diagrams are included.

PB 92845

Isaacs, J. D. and Wiegel, R. L.

Measurement of wave heights by means of a float in an open-end pipe. Mar 1948. 18p diagrs, fold graphs Mi $1.75 Ph $2.50

A series of experiments were performed at the University of California Hydraulic Laboratory at Berkeley to test the possibility of using open-end piped with float-type recorders for measuring wave heights for the purpose of applying these data in the planning of coastal engineering structures. The main problem was one of resonance in the tubes. This was particularly pronounced for wave periods of from one to six seconds as applied to actual installations. A mathematical analysis has been shown for the case of a constant period train of waves. It was shown that the band of frequencies encountered in the ocean would make it quite difficult if not a practical impossibility to analyze data obtained by this method.

PB 91509

Meiter, E.G. and Toering, A. J.

New York Hamburger Gummi Waren Cie, valve seats, Hamburg. Aug 1945. 1p Mi $1.25 Ph $1.25

Information obtained on material used for valve seats of Dräger oxygen apparatus

PB 93465

Molloy, E. W.

Waterproofing and shockmounting portable meters. Feb 1944. 3p photos, diagrs Mi $1.25 Ph $1.25 (Limited supply available mimeo $.05) (Also available from U.S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo $.05)

I. MDDC 1519 This investigation and development was carried out in the belief that it may be necessary to operate radiation detection equipment under severe conditions of humidity and that such equipment may be subjected to strong mechanical shock. The following is a list of points investigated:

1. Waterproofing of controls.
2. Guarding against mechanical damage to controls.
3. Shockproofing meter movements and circuit parts.
4. Protecting high resistance units against moisture.

Two sketches and two photographs of methods of waterproofing controls are given.

PB 92378

Moore, A. J. W. and Tabor, D.

Effect of hard metallic films in reducing the wear of metal surfaces. May 1942. 9p photos Mi $1.25 Ph $1.25

1. Gages, Screw thread—Australia

PB 92324

Rolf, E.

Advances in the field of contact converters. 1947. 54p photos, diagrs, graphs Mi $2.75 Ph $7.50

1. Converters, Contact—Germany

PB 90741

Siemens & Halske A. G., Berlin

Magnetic measuring apparatus for highly saturated magnetic steels. n.d. 8f (Text in German) Mi $1.25 Enl Pr $2.50

For abstract, see PB 90741s 1p Mi $1.25 Ph $1.25

1. Instruments, Measuring—Magnetic—Germany

PB 92886

Siemens & Halske A. G., Berlin.

Tool for Dov presses: Pressure trend meter for frequencies up to 1200 c.p.s. Oct 1940. 193p photos, drawings (19 fold). tables Mi $7.00 Ph $25.00

1. Pressure—Measurements—Germany 2. Gages, Pressure—Germany 3. Meters, Pressure—Germany 4. Meters, Power—Germany 5. Meters, Frequency—Germany

PB 90739

Siemens & Halske A. G., Berlin

Venturi installation for measuring the flow of water in canals, etc. 1938. 15f photos (Text in German) Mi $1.75 Enl Pr $3.75

For abstract see PB 90739s 1p Mi $1.25 Ph $1.25

1. Hydrography—Germany

PB 93474

Smith, Robert J.

High resistance bridge. Nov 1944. 6p photo, diagr Mi $1.25 Ph $1.25 (Limited supply available mimeo $.10) (Also available from U. S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo $.10)

1. MDDC 1523 The instrument is designed to afford a quick and accurate secondary calibration for high value resistors or as use as a 0-10 ratio comparison method for checking against a standard of one's own selection. Measurements are made with less than one volt on the unknown and 0.1 volt appears across the standard resistor in all measurements. Readings may be made within less than 1% of the standard resistors and duplication of readings may be made within a small fraction of 1%. This is made possible by the two-thirds division per mv. sensitivity of the null indicator. The accuracy of the instrument then depends primarily upon the careful calibration of the standards. The secondary limitation is that high resistances, those above 10^{-10} ohms, make the time constant of the null circuit large and make it sensitive to changes in capacity. This sensitivity causes a deflection as the "Null Set" switch is moved and makes the balancing process somewhat slower than when measuring lower resistances. Operating instructions are given as well as a description of construction, calibration, and maintenance. A circuit diagram and photograph of the instrument are also included.

PB 26624r2

U. S. Aeronautical Board.

Filter element: Hydraulic replaceable micronic reservoir type. Army-Navy aeronautical standard. Mar 1948. 1p drawings, table Mi $1.25 Ph $1.25

PB 21209a2

U. S. Air Force and U. S. Navy Dept.

Ammeters and voltmeters: Direct current. Air Force-Navy aeronautical specification. Jun 1948. 5p diagrs, table Mi $1.25 Ph $1.25

PB 93589

U. S. Air Force and U. S. Navy Dept.

Bulb: Temperature, cylinder head, electrical resistance, bayonet lock type, -50 To +300 degrees centigrade. Air Force-Navy aeronautical specification. Jul 1948. 13p drawing, tables Mi $1.75 Ph $2.50

1. Bulbs, Resistance—Specifications

PB 91778

U. S. Air Force and U. S. Navy Dept.

Handbook: Overhaul instructions, check valve—manually-operated hydraulic series 14388. Feb 1948. 8p photos, drawings, tables Mi $1.25 Ph $1.25

1. Valves, Check

PB 92460

U. S. Air Force and U. S. Navy Dept.

Thermocouple: Chromel-alumel, range 0 to +1000 degrees centigrade. Air Force-Navy aeronautical specification. Apr 1948. 11p drawings, tables Mi $1.75 Ph $2.50

1. Thermocouples

PB 89769s

U. S. Bureau of Ships.

Ventilation testing calculator. (cf. This is a computator, an instrument). Jul 1946.

available from O.T.S. at $1.50 Also available from O.T.S. Reference Section "For Reader Use Only."
1. Calculators 2. Ventilation—Ships

PB 93123

U. S. War Dept. and U. S. Navy Dept.
Capacitors. Mica-dielectric, fixed. Apr 1944. 59p diagr, drawings, graph, tables Mi $2.75 Ph $7.50
1. Capacitors, Mica dielectric

PB 93453

Wakefield, Ernest
Technical associates scaler. May 1944. 5p diagr Mi $1.25 Ph $1.25 (Limited supply available mimeo $.05) (Also available from U. S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo $.05)
1. MDDC 834 The Technical Associates Scaler with a scale of 128 is a Columbia type scaler with a potentiometer in the scaling stage plate circuit. Interstage coupling is the conventional variable air capacitance. Its method of operation, its circuit diagram together with its components are given for informational purposes.

PB 92888

Zeiss, Carl A. G., Jena, Ger.
Oberflaechen—pruefgeraet. (Surface—testing apparatus of Professor Schmaltz. Instructions for use). Jan 1939. 14p Mi $1.75 Ph $2.50
1. Micrometers—Germany

PB 93478

Zumwalt, Lloyd R.
Absolute beta counting using end-window Geiger-Mueller counter tubes. Sep 1947. 7p Mi $1.25 Ph $1.25 (Limited supply available mimeo $.10) (Also available from U.S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo $.10)
1. MDDC 1346 An extensive study has been made of the determination of the absolute disintegration rates of beta ray emitting isotopes of maximum energies 0.3 to 2.3 Mev. Conventional thin mica end-window Geiger-Müller counter tubes with a standard lead housing and source arrangement were calibrated for absolute beta counting. To do this, determinations were made of the "geometry" of the tubes for given source positions by using various sources of known disintegration rate and by the elimination of or the correction for effects due to absorption and scattering of beta particles. The disintegration rate of isotopes used in the calibration were ascertained by one of four methods: (1) coincidence counting technique, (2) carrying of a daughter activity from a known amount of parent, (3) observing the growth of activity of an alpha emitting daughter, or (4) by calorimetric measurement. Counter tube "geometries" determined by use of isotopes Co^{60}, I^{131}, Au^{198}, RaE, Na^{24}, and UX_2 with correction for absorption and scattering effects, showed a standard deviation of about three per cent and seemed to be substantially independent of beta energy. The "geometries" obtained correspond to geometries calculated from solid angle considerations in the case where the "sensitive volume" of the counter is taken to begin from one to three millimeters in back of the counter window.

LEATHER AND LEATHER PRODUCTS

PB 93763

Deutsche Kunstlederwerke Wolfgang G.m.b.H., Wolfgang, Ger.
Artificial leather, sample book no. F-464-45. n.d. 69 samples only
For loan and reference use only
Legends in German
1. Leather, Synthetic—Samples—Germany

PB 21484r

U. S. Air Force and U. S. Navy Dept.
Leather: Goatskin. Air Force-Navy aeronautical specification. Jun 1948. 5p table Mi $1.25 Ph $1.25

LUMBER AND WOOD PRODUCTS

PB 74685a

Deutsche Gold- und Silberscheideanstalt A. G., Kredenbach, Ger.
Reports on wood carbonization (saccharification of wood). n.d. 5p Mi $1.25 Ph $1.25
Supplement 1 to PB 74685
Abstracts to Micro FIAT L 125, Frames 2029-2274

PB 80961

U. S. Army Air Forces
Set—Woodworking test, structures, aircraft laboratory. (Tech Order 00-30-987). Feb 1947. 3p Mi $1.25 Ph $1.25

MACHINERY (EXCEPT ELECTRICAL)

PB 73539a

Behnsen, Karl, & Co., Grossauheim, Ger.
Condux crushing mills. (Abstract). 1946. 1p Mi $1.25 Ph $1.25
1. Micro FIAT AA 215, Frames 1-19, abstract

PB 90977

Bochumer Verein für Gusstahlfabrikation A. G., Bochum, Ger.
Details of wheel, axle and machine shops. Layout of hammer and punching mills and swaging press. 1945-1946. 24f drawings, tables Mi $2.00 Enl Pr $5.00
Referred to on p. 66 of BIOS FR 699, Item 21, 32 (PB 51067)
For abstract see PB 90977a 2p Mi $1.25 Ph $1.25
1. Foundries—Germany 2. Micro BIOS FD 1870/46, Frames 1-18 3. BIOS FR 699, Item 21, 32 LD

PB 91368

Bragag Braunkohle-Benzin A. G., Böhlen, Ger.
Data on Winkler gas plant and purification. 1938-1942. 3f (Text in German) Mi $1.25 Ph $2.50
For abstract see PB 91368s Ip Mi $1.25 Ph $1.25
1. Generators, Water gas—Germany

PB 93256

Brandeberry, Frank E., Jr.
Comparative test of crane, tractor, Austin-Western hydraulic, with crane, tractor, 2-ton M3. Jun 1948. 22p photos, tables Mi $2.00 Ph $3.75
1. Cranes, Tractor—Tests 2. M3 (Tractor cranes) 3. M5 (Tractor cranes)

PB 92179

British Intelligence Objectives Sub-Committee
Glossary of technical terms for junkers opposed piston diesel engines. n.d. 30p Mi $2.00 Ph $3.75
1. Engines, Diesel—Dictionaries

PB 93490

Brooks, W. W. and others.
Investigation of German heavy forging plants. Nov 1945. 180p drawings, diagrs, photos, tables Mi $6.50 Ph $22.50
1. Forging plants—Germany 2. Machines. Forging—Germany 3. BIOS FR 1398, Item 21, 31

PB 92827

Dahl, Andrew I. and Freeze, Paul D.
Laboratory evaluation of a method proposed by Gnam for measuring the temperature of rotating parts. May 1948. 19p photos, drawings (1 fold), graphs Mi $1.75 Ph $2.50
1. Turbines, Gas—Thermodynamics 2. Rotating bodies—Temperature—Measurements 3. U. S. National Bureau of Standards

PB 90988

Dawihl, W. and Rix, W.
Connection between welding strength and wear and tear of cutting tools. 1942. 5f graph, tables (Text in German) Mi $1.25 Enl Pr $2.50
For abstract see PB 90988s Ip Mi $1.25 Ph $1.25
1. Tools, Cutting—Maintenance and repair—Germany

PB 93765

Deutsche Kraftfahrtforschung im Auftrage des Reichs- und Preuszischen Verkehrsministeriums.
Documents concerning motor-car engines. 1944. 602f photos, drawings, graphs Mi $9.00 Enl Pr $78.75
1. Engines, Internal combustion—Research—Germany 2. Micro FIAT A 358, Frames 612-1207

PB 73688s

Fabritz, Gustav, ed.
Die regelung der kraftmaschinen unter besonderer berucksichtigung der selbsttatigen wasserturbinen-regelung. (Engine control with particular regard to automatic regulating of water turbines). 1940. 2p Mi $1.25 Ph $1.25
1. Micro FIAT AA 219, Frames 1-404, abstract

PB 90995

Fissenewert, Wilhelm Gütersloh, Ger.
Precision chain drives. 1931. 107f photos, graphs (Text in German) Mi $4.50 Enl Pr $15.00
Referred to on p. 66 of BIOS FR 640, Item 19, 31 (PB 49218)
For abstract see PB 90995s Ip Mi $1.25 Ph $1.25
1. Chains—Catalogs—Germany 2. Catalogs, Commercial—Germany 3. BIOS FR 640, Item 19, 31 LD

PB 92375

Honeycombe, R. W. K. and Tabor, D.
Frictional and seizure properties of a high pressure gear pump HP-1. Oct 1942. 15p photos, tables Mi $1.75 Ph $2.50
1. Pumps, High pressure—Tests—Australia

PB 93629s41

1. G. Farbenindustrie A. G., Höchst, Ger.
Abfallkasten für ampullenabschneide-sowie-zuschmelzmaschine. Mar 1941. 8p drawing only Mi $1.25 Ph $1.25
Legends in German
1. Ampoules—Filling machines—Germany 2. FIAT FR 1024, Supp.

PB 93629s50

1. G. Farbenindustrie A. G., Höchst, Ger.
Absaughaube für ampullenabschneide zuschmelzmaschine. Mar 1943. 8p drawing only Mi $1.25 Ph $1.25
Legends in German
1. Ampoules—Filling machines—Germany 2. FIAT FR 1024, Supp.

PB 93629s6

1. G. Farbenindustrie A. G., Höchst, Ger.
Ampullenfüllkessel. Jun 1932. 4p drawing only Mi $1.25 Ph $1.25
Legends in German
1. Ampoules—Filling machines—Germany 2. FIAT FR 1024, Supp.

PB 93629s27

1. G. Farbenindustrie A. G., Höchst, Ger.
Arrangement of pipe connections for Scheffer apparatus. Jan 1937. 16p drawing only Mi $1.75 Ph $2.50
Legends in German script
1. Ampoules—Filling machines—Germany 2. FIAT FR 1024, Supp.

PB 93629s29
I. G. Farbenindustrie A. G., Höchst, Ger.
Arrangement of pipelines for the boiler and solvent tank of Scheffer apparatus. Apr 1937. 8p drawing only Mi $1.25 Ph $1.25
Legends in German script
1. Ampoules—Filling machines—Germany 2. FIAT FR 1024, Supp.

PB 93629s42
I. G. Farbenindustrie A. G., Höchst, Ger.
Aufhängegestell für ampullenabschneide-sowie-zuschmelzmaschine. Mar 1941. 8p drawing only Mi $1.25 Ph $1.25
Legends in German
1. Ampoules—Filling machines—Germany 2. FIAT FR 1024, Supp.

PB 93629s26
I. G. Farbenindustrie A. G., Höchst, Ger.
Boiler design for Scheffer apparatus. Dec 1936. 16p drawing only Mi $1.75 Ph $2.50
Legends in German script
1. Ampoules—Filling machines—Germany 2. FIAT FR 1024, Supp.

PB 93629s47
I. G. Farbenindustrie A. G., Höchst, Ger.
Brenner und befestigung für ampullen zuschmelz-maschine. May 1942. 8p drawing only Mi $1.25 Ph $1.25
Legends in German
1. Ampoules—Filling machines—Germany 2. FIAT FR 1024, Supp.

PB 93629s8
I. G. Farbenindustrie A. G., Höchst, Ger.
Component parts of ampoule filling machinery. (No specific title noted). Mar 1944. 4p drawing only Mi $1.25 Ph $1.25
Legends in German
1. Ampoules—Filling machines—Germany 2. FIAT FR 1024, Supp.

PB 93629s9
I. G. Farbenindustrie A. G., Höchst, Ger.
Component parts of ampoule filling machinery. (No specific title noted). Apr 1944. 4p drawing only Mi $1.25 Ph $1.25
Legends in German
1. Ampoules—Filling machines—Germany 2. FIAT FR 1024, Supp.

PB 93629s11
I. G. Farbenindustrie A. G., Höchst, Ger.
Component parts of ampoules filling machinery. (No specific title noted). Mar 1944. 4p drawing only Mi $1.25 Ph $1.25
Legends in German
1. Ampoules—Filling machines—Germany 2. FIAT FR 1024, Supp.

PB 93629s33
I. G. Farbenindustrie A. G., Höchst, Ger.
Component parts of ampoule filling machinery. (No specific title noted). Mar 1944. 8p drawing only Mi $1.25 Ph $1.25
Legends in German
1. Ampoules—Filling machines—Germany 2. FIAT FR 1024, Supp.

PB 93629s48
I. G. Farbenindustrie A. G., Höchst, Ger.
Component parts of ampoule filling machinery. (No specific title noted). Mar 1944. 8p drawing only Mi $1.25 Ph $1.25
Legends in German
1. Ampoules—Filling machines—Germany 2. FIAT FR 1024, Supp.

PB 93629s52
I. G. Farbenindustrie A. G., Höchst, Ger.
Component parts of ampoule filling machinery. (No specific title noted). Mar 1944. 8p drawing only Mi $1.25 Ph $1.25
Legends in German
1. Ampoules—Filling machines—Germany 2. FIAT FR 1024, Supp.

PB 93629s16
I. G. Farbenindustrie A. G., Höchst, Ger.
Cover for ampoule filling equipment. Nov 1935. 8p drawing only Mi $1.25 Ph $1.25
Legends in German script
1. Ampoules—Filling machines—Germany 2. FIAT FR 1024, Supp.

PB 93629s5
I. G. Farbenindustrie A. G., Höchst, Ger.
D-maschine: Kammer für dosierungen von 0, 15 ÷ 0,30 gr. und dosierungsschieber für 0,30 ÷ 0,90 gr. 1926. 4p drawing only Mi $1.25 Ph $1.25
Legends in German
1. Ampoules—Filling machines—Germany 2. FIAT FR 1024, Supp.

PB 93629s2
I. G. Farbenindustrie A. G., Höchst, Ger.
D-maschine (Typ. 4) (0,3 ÷ 0,9). 1926. 16p drawing only Mi $1.75 Ph $2.50
Legends in German
1. Ampoules—Filling machines—Germany 2. FIAT FR 1024, Supp.

PB 93629s3
I. G. Farbenindustrie A. G., Höchst, Ger.
Details für D-maschine (Typ 4) (für Dosier 0,30 ÷ 0,90). Jul 1926. 16p drawing only Mi $1.75 Ph $2.50
Legends in German
1. Ampoules—Filling machines—Germany 2. FIAT FR 1024, Supp.

PB 93629s4

I. G. Farbenindustrie A. G., Höchst, Ger.
Details zur D-maschine (Typ 4 (Dosis 0,30 + 0,90 gr). Jul 1926. 16p drawing only Mi $1.75 Ph $2.50
Legends in German
1. Ampoules—Filling machines—Germany 2. FIAT FR 1024, Supp.

PB 93629s7

I. G. Farbenindustrie A. G., Höchst, Ger.
Diagramm zur salve dosierung. Mar 1944. 4p drawing only Mi $1.25 Ph $1.25
Legends in German
1. Ampoules—Filling machines—Germany 2. FIAT FR 1024, Supp.

PB 93629s17

I. G. Farbenindustrie A. G., Höchst, Ger.
Discharge flask for novocaine powder. Dec 1935. 8p drawing only Mi $1.25 Ph $1.25
Legends in German script
1. Ampoules—Filling machines—Germany 2. FIAT FR 1024, Supp.

PB 93629s

I. G. Farbenindustrie A. G., Höchst, Ger.
Glasplatte für Jalvarsan dosier maschine. Mar 1942. 1p drawing only Mi $1.25 Ph $1.25
Legends in German
1. Ampoules—Filling machines—Germany 2. FIAT FR 1024, Supp.

PB 93629s10

I. G. Farbenindustrie A. G., Höchst, Ger.
Glasscheibe und fassung. Mar 1944. 4p drawing only Mi $1.25 Ph $1.25
Legends in German
1. Ampoules—Filling machines—Germany 2. FIAT FR 1024, Supp.

PB 93629s45

I. G. Farbenindustrie A. G., Höchst, Ger.
Hammerwerk für ampullenabschneide-sowie-zuschmelz-maschine. Apr 1941. 16p drawing only Mi $1.75 Ph $2.50
Legends in German
1. Ampoules—Filling machines—Germany 2. FIAT FR 1024, Supp.

PB 93629s20

I. G. Farbenindustrie A. G., Höchst, Ger.
Iron frame for mounting the boiler and solvent tank of the Scheffer apparatus. Aug 1936. 8p drawing only Mi $1.25 Ph $1.25
Legends in German script
1. Ampoules—Filling machines—Germany 2. FIAT FR 1024, Supp.

PB 93629s24

I. G. Farbenindustrie A. G., Höchst, Ger.
Iron frame for mounting the two filling vessels for the Scheffer apparatus. Dec 1936. 16p drawing only Mi $1.75 Ph $2.50
Legends in German script
1. Ampoules—Filling machines—Germany 2. FIAT FR 1024, Supp.

PB 93629s28

I. G. Farbenindustrie A. G., Höchst, Ger.
Layout of hydrogen tanks for Scheffer apparatus. Feb 1937. 8p drawing only Mi $1.25 Ph $1.25
Legends in German script
1. Ampoules—Filling machines—Germany 2. FIAT FR 1024, Supp.

PB 93629s15

I. G. Farbenindustrie A. G., Höchst, Ger.
Lid arrangement for ampoule filling machine. Nov 1935. 16p drawing only Mi $1.75 Ph $2.50
Legends in German script
1. Ampoules—Filling machines—Germany 2. FIAT FR 1024, Supp.

PB 93629s46

I. G. Farbenindustrie A. G., Höchst, Ger.
Rüderkasten für ampullenabschneide zuschmelz-maschine. Apr 1941. 16p drawing only Mi $1.75 Ph $2.50
Legends in German
1. Ampoules—Filling machines—Germany 2. FIAT FR 1024, Supp.

PB 93629s12

I. G. Farbenindustrie A. G., Höchst, Ger.
Schlitzbrenner für ampullen-zuschmelz-maschine. Sep 1942. 4p drawing only Mi $1.25 Ph $1.25
Legends in German
1. Ampoules—Filling machines—Germany 2. FIAT FR 1024, Supp.

PB 93629s23

I. G. Farbenindustrie A. G., Höchst, Ger.
Solvent flask for Scheffer apparatus. Dec 1936. 8p drawing only Mi $1.25 Ph $1.25
Legends in German script
1. Ampoules—Filling machines—Germany 2. FIAT FR 1024, Supp.

PB 93629s19

I. G. Farbenindustrie A. G., Höchst, Ger.
Table for use in drawing off specimens. Jan 1936. 8p drawing only Mi $1.25 Ph $1.25
Legends in German script
1. Ampoules—Filling machines—Germany 2. FIAT FR 1024, Supp.

PB 93629s18

I. G. Farbenindustrie A. G., Höchst, Ger.
Table mounting arrangement for decanting flask. Jan 1936. 8p drawing only MI $1.25 Ph $1.25
Legends in German script
1. Ampoules—Filling machines—Germany
2. FIAT FR 1024, Supp.

PB 93629s51

I. G. Farbenindustrie A. G., Höchst, Ger.
Teile der ampullenabschneide und zuschmelzmaschine. Mar 1943. 8p drawing only MI $1.25 Ph $1.25
Legends in German
1. Ampoules—Filling machines—Germany
2. FIAT FR 1024, Supp.

PB 93629s37

I. G. Farbenindustrie A. G., Höchst, Ger.
Tischgestell für ampullenabschneide-sowie-zuschmelzmasch. Mar 1941. 16p drawing only MI $1.75 Ph $2.50
Legends in German
1. Ampoules—Filling machines—Germany
2. FIAT FR 1024, Supp.

PB 93629s22

I. G. Farbenindustrie A. G., Höchst, Ger.
Two pressure vessels for Scheffer apparatus. Oct 1936. 8p drawing only MI $1.25 Ph $1.25
Legends in German script
1. Ampoules—Filling machines—Germany
2. FIAT FR 1024, Supp.

PB 93629s49

I. G. Farbenindustrie A. G., Höchst, Ger.
Wellenstumpf für ampullenabschneide-sowie-zuschmelzmaschine. Sep 1942. 8p drawing only MI $1.25 Ph $1.25
Legends in German
1. Ampoules—Filling machines—Germany
2. FIAT FR 1024, Supp.

PB 73597s

Kugelfischer George Schaefer A. G., Schweinfurt, Ger.
Abnormal types of ball bearings. (Abstract). 1939-1945. 1p MI $1.25 Ph $1.25
1. Micro FIAT AA 230, Frames I-III, abstract

PB 92380

Moore, A. J. W. and Tabor, D.
Examination of a chrome-molybdenum cylinder barrel produced on a push bench. Jul 1942. 5p photos MI $1.25 Ph $1.25
1. Cylinders—Wear—Australia

PB 92385

Moore, A. J. W.
Examination of piston rings chrome plated in America by the Van Der Horst process. Dec 1942. 5p MI $1.25 Ph $1.25
1. Piston rings—Tests—Australia

PB 92777

Peabody, P. E.
I. Augsburg-Nuremberg machine works, diesel engines. II. Review of diesel engines of the Augsburg Nuremberg machine works. III. The supercharger assembly of the MV 40/46 engine. Nov 1945. 21p tables MI $2.00 Ph $3.75
1. Engines, Diesel—Supercharged—Germany 2. MV 40/46 (Engine) 3. Maschinenfabrik Augsburg-Nürnberg A. G., Nürnberg, Ger.

PB 22447s

Perry, R. L.
Alfred Teves Maschinen-u Armaturenfabrik G.m.b.H., Frankfurt (Fechenheim). Jul 1945. 65p photos, drawings (1 fold) (Text in German) MI $3.00 Ph $8.75
1. FIAT FR 74

PB 92890

Polte, Magdeburg, Ger.
Instructions for the use of the Gasannealing machine, Modell Gue 109. n.d. 8p photo, fold drawing MI $1.25 Ph $1.25
1. Machine, Gas annealing—Germany

PB 93493

Quertier, R. L. and others.
Manufacture of air compressors and pneumatic tools and appliances in Germany. n.d. 110p tables, photos MI $4.50 Ph $13.75
1. Compressors—Manufacture—Germany 2. Tools, Pneumatic—Manufacture—Germany 3. BIOS FR 1648, Item 31

PB 90756

Schmidt, Karl G.m.b.H., Neckarsulm, Ger.
Bearings for multiple throw crankshafts. 1931. 23f drawings, diagrs (Text in German) MI $2.00 Enl Pr $5.00
For abstract see PB 90756s 1p MI $1.25 Ph $1.25
1. Crankshafts—Germany 2. Bearings, Aluminum—Germany

PB 93444

Schuh, Wilhelm
Wellenschwingungen und ihre Bedeutung als Ursache der. (New knowledge of vibrations in steam-turbines). n.d. 211p (Text in German and English) MI $7.75 Ph $27.50
1. Turbines, Steam—Vibration

PB 90997

Seuthe, August, Hemer, Ger.
Automatic machine for production of cycle chains. Apr 1939. 26f drawings only MI $2.00 Enl Pr $5.00
Legends in German
See also BIOS FR 640, Item 19,31 (PB 49218)
For abstract see PB 90997s 1p MI $1.25 Ph $1.25
1. Chains—Manufacture—Germany 2. Chains, Bicycle—Germany

PB 90996

Standards for precision chains. n.d. 145f tables (Text in German) Mi $5.75 Enl Pr $20.00
Referred to in appendix B of BIOS FR 640, Item 19,31 (PB 49218)
For abstract see PB 90996s 1p Mi $1.25 Ph $1.25
1. Chains—Standards—Germany

PB 91792

U. S. Air Force.
General: Modification of B-29 quick engine sling assemblies. Mar 1948. 2p drawing Mi $1.25 Ph $1.25
1. B-29 (Airplane) 2. Slings 3. Hoists, Engine 4. AAF TO 19-1-171

PB 47688r

U. S. Air Force.
Handbook operation, service, and overhaul instructions with parts catalog, for oil clarifier, Model MC-3. (Tech Order 10-1-141) Nov 1947. 3p Mi $1.25 Ph $1.25

PB 91788

U. S. Air Force.
Handbook, operation and service instructions: USAF type B-2 Kerrick Kleaner. Feb 1948. 48p photos, drawings, tables Mi $2.50 Ph $6.25
1. ARM-AC (Kerrick kleaner) 2. Cleaners, Steam 3. AAF TO 17-5AB-20

PB 91777

U. S. Air Force and U. S. Navy Dept.
Handbook, overhaul instructions, motor driven fuel pumps, models 121064-012, 121064-040, 121064-020. Mar 1948. 19p photos, drawings, tables Mi $1.75 Ph $2.50
1. Pumps, Fuel—Engine driven 2. AN 03-10EA-22

PB 91779

U. S. Air Force.
Parts catalog, motor driven fuel pumps, models 121064-012, 121064-020 and 121064-040. Mar 1948. 8p photos, tables Mi $1.25 Ph $1.25
1. Pumps, Fuel—Engine driven 2. AAF TO 03-10EA-23

PB 90752

Zettler, Gustav-Adolf
Prevention of danger liable to occur in gas heated nitration furnaces. n.d. 9f diagrs (Text in German) Mi $1.25 Enl Pr $2.50
For abstract see PB 90752s 1p Mi $1.25 Ph $1.25
1. Furances, Gas—Germany 2. Safety education—Germany 3. Micro BIOS FD 1658/47, Frames 1-14

MEDICAL RESEARCH AND PRACTICE, INCLUDING CLINICAL APPLICATION OF DRUGS AND PHARMACEUTICALS

PB 92424

Australia. Council for Scientific and Industrial Research. National Standrads Laboratory. Physics Section.
Eye fatigue arising during the installation of alfoil heat insulating lining. Aug 1944. 2p Mi $1.25 Ph $1.25
1. Eyes—Fatigue—Australia

PB 91915

Barr, David P. and Sulzberger, Marion B.
Detailed, Interim Report of Project M-906. General remarks on techniques, Etc. Jun 1942. 21p tables Mi $2.00 Ph $3.75
The experiments reported have to do with the development and standardization of reproducible methods for application of the vesicant agents H and Mi (mustard gas and Lewisite) and the degree of damage to animal tissue. Twenty-nine experiments are reported.

PB 91914

Barr, David P. and Sulzberger, Marion B.
Survey report of Project No. M906. Work begun Mar 12, 1942. Apr 1942. 4p Mi $1.25 Ph $1.25
The experiments are considered in the light of efforts at orientation. The three penetrating vehicles, Penetrasol A (Solvoxyl A), Penetrasol B (Solvoxyl B), and Penetrasol M (Solvoxyl M) were prepared and 7 experiments were conducted using M and Mi on albino rabbits and albino guinea pigs.

PB 91886

Bergmann, Werner and others.
Studies on the conversion of ergosterol into 11-ketosteroids. Abstract of final report, July 14, 1944. Compound E. Monthly Progress report 1-13, Apr 30, 1942—Mar 31, 1944. 1942-1944. 17p Mi $1.75 Ph $2.50
Attempts have been made to convert ergosterol into 11-ketosteroids by way of dehydroergosterol, which has a double bond in the 9-11-position. It has been demonstrated that the sidechain of ergosterol may be eliminated by treatment of the maleic anhydride adduct with ozone and subsequent degradation of the resulting aldehyde. The steps are few, and the yields of the intermediates are good. The final elimination of maleic anhydride, however, gives such poor yield as to make the entire process rather unprofitable. Starting with the maleic anhydride adduct of dehydro-ergosteryl-acetate the introduction of oxygen on C_{11} was made possible in relatively few steps and with reasonably good yields. During the final elimination of maleic anhydride, however, dehydrogenation and rearrangement took place to give an 11-ketosteroid in which one

of the rings, probably ring B, is aromatic. Thus the introduction of a keto group at C_{11} was successful, but the resulting product was unsuited for further conversion into the desired corticosteroids. Attempts were made to repeat this series of experiments with dehydroergosteryl-acetate peroxide, but they were unsuccessful because of the general instability of some of the intermediates. The oxidation of methylketo steroids with potassium hypoiodite has been investigated, and the claims of both Goldschmidt and Harker have been substantiated. The preparation of etio acids by this method is of somewhat questionable practical value.

PB 91887

Bessey, O. A. and Lowry, O. H.

Studies and experimental investigations in connection with the relation of riboflavin to injuries of the eyes. Abstract of final report and Monthly Progress Reports #1-3, Nov 23, 1942—Jun 11, 1943. Jun 1943. 6p Mi $1.25 Ph $1.25

The possibilities that strong light may directly or indirectly decrease the riboflavin content of the cornea and by this means lead to early vascularization of this structure and that the riboflavin content of this tissue may be important to the healing rate of lesions of the cornea have been investigated. By use of micro-analytical methods, no detectable decrease (±10%) occurred in the riboflavin content of the corneas of rats exposed continuously for long periods of time to strong light as compared with controls left in the dark. Likewise, the development of corneal vascularity (slip lamp observations) as a result of riboflavin deficiency occurred no sooner in the "lighted animals" compared with the controls. Injuries of the cornea produced by ultraviolet light, nitric acid, and removal of the epithelium healed at a normal rate unless the animals were severely riboflavin deficient. Large amounts of riboflavin did not stimulate the healing process.

PB 91917

Bundesen, Herman N.

Treatment of primary of secondary syphilis at the Chicago Intensive Treatment Center. Bimonthly Progress reports 1-6, Mar 15, 1945—Jan 15, 1946. 1945-1946. 12p table Mi $1.75 Ph $2.50

A series of six bimonthly progress reports using fever and penicillin and with penicillin alone. Each report is followed by a short general discussion.

PB 91916

Burrows, William

Active Immunization to Asiatic Cholera. Bimonthly progress reports 9-19 inclusive and 21-22. Jul 23, 1943—Dec 15, 1945. 1943-1945. 32p tables Mi $2.25 Ph $5.00

The work reported here is in three parts: (1) studies on the antigenic structure of the cholera vibrios; (2) measurement of the immunological response by active and passive mouse protection tests; (3) the isolation, biochemical nature, and immunological and pharmacological properties of the cholera toxin. Reports 1 through 8 and no 20 are missing.

PB 93449

Cantril, S. T.

Safety rules and procedures concerning activity hazards. Jun 1944. 42p charts Mi $2.50 Ph $6.25 (Limited supply available mimeo $.20) (Also available from U. S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo $.20)

I. MDDC 992

The following sections are covered in the report: function of the subcommittee on activity hazards, general safety rules and procedures, radiation safety monitoring, maintenance, transportation of active materials or equipment, radium sources, classification of injuries from over-exposure to activity in any form, and rules and procedures issued by separate areas or locations.

PB 93479

Craddock, C. G., Jr. and Lawrence, J. S.

Effect of roentgen irradiation on antibody formation in rabbits. Feb 1948. 24p table, graphs Mi $2.00 Ph $3.75 (Limited supply available mimeo $.15) (Also available from U. S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo $.15)

I. MDDC 1698 Exposure of rabbits to 250r whole body x-ray eight hours prior to immunization causes a greatly diminished antibody response. This depressant effect is not permanent. Exposure of rabbits to the same amount of x-ray after antibody formation has begun, but before its completion, in no way impairs antibody formation. The degree of lymphopenia was comparable in each group. The "anamnestic phenomenon" could not be elicited in rabbits by x-ray exposure.

PB 91893

Cuthbert, Marvin

Therapeutic effect of diethyl dithiocarbamate against HN2 lesions of rabbits' eyes. Oct 1943. 3p graph, table Mi $1.25 Ph $1.25

I. Dithiocarbamate, Diethyl

PB 1688s

Hallervorden, J. and others.

Various medical articles. Abstracts. 1945. 38p Mi $2.25 Ph $5.00

PB 93456

Hamilton, J. G.

Summary of Iodine physiology and metabolic studies using radioactive isotopes of Iodine. Oct 1944. 3p graph Mi $1.25 Ph $1.25 (Limited supply available mimeo $.05) (Also available from

U. S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo $.05)

I. MDDC 1060 A study of the absorption and excretion in normal human subjects indicates that this element is rapidly absorbed and rapidly eliminated. When a labeled dose of 14 milligrams is given to normal human adult subjects the iodine is almost exclusively excreted by way of the kidneys at an exponential rate, the half time being approximately 18 hours. The uptake by the thyroid under these conditions for normal adult subjects averages 4%. With the exception of the rat, the average uptake by the thyroid gland of radioiodine without inert carrier at the end of 24 hours was approximately 20%. In the case of the rat the uptake was considerably greater and frequent levels in excess of 65% were encountered. Comparable studies with human subjects has given a value of 20% uptake for normal adults when iodine without carrier was used. At the end of 26 hours in both the thyroid and in the blood plasma approximately 90% of the radioiodine, when administered without carrier, was converted into diiodotyrosine and thyroxine. The destructive effect of carrier free iodine upon the thyroid tissue of rabbits and dogs without perceptible radiation effects upon any other tissues has been demonstrated. Complete destruction of the entire gland without either physiological or histological changes to the parathyroids in rabbits and dogs has been observed. The quantity of radioiodine required was 300 microcuries of I^{131} per kilogram which produced a thyroid irradiation of over 25,000r. Smaller amounts of radioiodine without inert carrier have been employed in the treatment of a few cases of hyperthyroidism with complete and prolonged remission of all of the clinical evidences of this type of thyroid disorder. The dose required ranged from 1 to 1.5 millicuries of I^{131} (20 to 30 microcuries per kg of body weight). The internal thyroid irradiation was estimated to have been from 1000 to 3000r.

PB 91888

Harkins, Henry N. and others.

Traumatic shock. Abstract of Final Report and Monthly Progress Reports #1-2 & 4-25, Mar 2, 1942—Aug 2, 1945. Aug 1945. 28p tables Mi $2.00 Ph $3.75

Experiments on burn and tourniquet shock in rats demonstrated a number of chemical and metabolic changes, particularly a rise in plasma amino nitrogen and a fall in adrenal total cholesterol. Hypophysectomy done before the trauma prevents the fall in adrenal cholesterol. Preliminary observations on selective intake show no increased intake of sodium chloride or sodium lactate in burn or tourniquet shocked rats. Other preliminary experiments show no marked sparing action of intraperitoneal sodium lactate injections in burned rats. Experiments have been performed in which the rate of rise in venous pressure in an extremity following venous occlusion give at least some index of the rate of blood flow in an extremity. Applications of heat, cold, and exercise produce alterations in blood flow by this method, as has been shown by other authors to occur with plethysmographic methods. The method may find application in diagnosis of early shock or peripheral vascular injuries. DiPalma's method of production of reactive hyperemia was observed in several patients. The results obtained were similar to those reported by DiPalma. It was our impression that considerable experience with the method would be required before it could be used with the speed and accuracy necessary for its use as a sign of incipient shock. A method has been described which appears to be useful in the diagnosis of early shock before a significant decline of the arterial blood pressure has occurred. The method consists of the application of blood pressure cuffs to the upper thighs and of the inflation of the cuffs to a point slightly above the diastolic pressure level. The associated fall of arterial pressure may give false positive signs of shock, but it apparently is correct in indicating incipient traumatic shock when it exists.

PB 93461

Heidelberger, Charles

Metabolic degradation of 1,2,5,6-d benzanthracene labeled in the 9-position with carbon 14. Aug 1947. 5p tables Mi $1.25 Ph $1.25 (Limited supply available mimeo $.10) (Also available from U. S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo ($.10)

The metabolism of dibenzanthracene may be studied conveniently when the molecule is labeled with carbon 14. The distribution of radioactivity in the organs and excreta of mice is described. It is now possible to gain considerable insight into the metabolic processes of the animal by chemical fractionation of excreta samples, while following the radioactivity. In feces, only about 4% of the activity excreted is present as dibenzanthracene itself. A large amount of water-soluble activity was observed which indicates extensive degradation of the original substance. Further work should result in the elucidation of the chemical nature of these metabolites.

PB 93450

Hempelmann, Louis H.

Protection of laboratory personnel handling radioactive materials. May 1947. 12p graphs Mi $1.75 Ph $2.50 (Limited supply available mimeo $.10) (Also available from U. S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo $.10)

This report consists of a short outline of material and graphs to be presented in a 20 minute talk at the Symposium of Isotopes of the Conference on Metabolic Aspects of Convalescense, sponsored by the J. Macy, Jr. Foundation in New York on March 31, 1947. The outline consists of the following:

I. The present status of the "tolerance dose" of ionizing radiation.

a. The discussion of the "tolerance dose" to be based chiefly on the declassified papers of Lorenz, Jacobson Henshaw and Prosser, which were presented on December 2, 1946 at the Radiological Society of North America.

b. Methods of calculating radiation dosage from radio active materials taken into the body to be discussed with emphasis on the sources of error of such calculations. No classified information or exhibits to be presented.

II. The diagnosis of early radiation injury.

a. The inadequacy of present methods of diagnosing early radiation damage to be discussed as outlined in declassified paper of Jacobson.

b. Three previously classified graphs showing the blood changes of persons acutely exposed to large doses of ionizing radiation to be shown.

c. The previously classified observations at Los Alamos Scientific Laboratory of the increase in refractile neutral red bodies in the lymphocytes of persons chronically and acutely exposed to ionizing radiation to be presented, the discussion to center around eight charts and graphs.

PB 1682s

I. G. Farbenindustrie A. G., Höchst, Ger.

Pharmacologic report on compounds 8001-10,000 tested by I. G. Farbenindustrie Höchst, Dec 20, 1939 to May 1944. Abstract, May 1944. 3p Mi $1.25 Ph $1.25

PB 1702s

I. G. Farbenindustrie A. G., Leverkusen, Ger.

I. G. Farben reports from the Division of Experimental Pathology and Bacteriology. Annual reports. Abstracts. 1942-1944. 31p Mi $2.25 Ph $5.00

Annual reports for 1942 and 1943 contain I. G. Farben, Leverkusen's most recent work on sulfonamide compounds.

PB 1694s

Kaiser Wilhelm Institute. Anatomic and General Pathologic Section, Berlin.

Miscellaneous medical reprints. Abstracts. 1937-1944. 8p Mi $1.25 Ph $1.25

PB 93298

Kobayashi, Harujiro

Review of recent research on medical entomology in Korea. n.d. 5p table Mi $1.25 Ph $1.25

1. Entomology—Korea 2. Flies—Korea

PB 91899

McLean, John M. and Cuthbert, Marvin.

Effect of irrigating bal from the rabbits' eye one minute after treatment for lewisite vapor lesions. May 1943. 4p graph, tables Mi $1.25 Ph $1.25

1. Glycerine, 1,2-Dithio—Physiological effects 2. Lewisite burns—Therapy 3. Ointments, 1,2-Dithioglycerine 4. Cornell University. Medical College. Committee on the Treatment of gas casualties. 5. U. S. Office of Scientific Research and Development. Committee on Medical Research.

PB 1703s

Miscellaneous German medical articles. Abstracts. 1938-1943. 5p Mi $1.25 Ph $1.25

1. Micro SG 22, abstract

PB 88762

Nachtsheim, Hans

Rabbits afflicted with hereditary diseases. (Veröffentlichung der Reichsstelle für den Unterrichtsfilm C 240). n.d. 4p Mi $1.25 Ph $1.25

PB 1687s

Silicosis. Abstracts. 1934-1942. 17p Mi $1.75 Ph $2.50

PB 1684s

Six groups of pamphlets on German medicine. Abstract. Dec 1945. 24p Mi $2.00 Ph $3.75

PB 1686s

Special reel for Capt. Eley for chemical warfare. Abstract. 1942. 13p Mi $1.75 Ph $2.50

Abstracts of miscellaneous medical publications. See listing of PB 1686 in V. I, P.777 of this Bibliography.

PB 93463

Sprague, George F. and others.

Initial studies of the inhalation toxicity of beryllium sulfate and beryllium metal fume. Sep 1947. 15p graphs, tables, photos Ml $1.75 Ph $2.50 (Limited supply available mimeo $.10) (Also available from U. S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo $.10)

1. MDDC 1318

Data from 56 animals were collected to supply information relevant to the poisonous effects, including the organs injured and the route of the damage, caused by the inhalation of beryllium sulfate tetrahydrate dust at a concentration approximating 90 mg of the salt per cubic meter of air. Six criteria of toxicity were utilized in evaluating the information obtained from the animals which comprised 2 dogs, 3 rabbits, 10 rats, 14 guinea pigs, 20 mice and 7 hamsters. The animals were exposed 6 hours daily for a two-week period, a total of 66 hours, to a dust of this soluble beryllium salt in a small inhalation exposure chamber. Mortality for all species dying as a result of exposure was 43% of the 56 exposed animals or 20 of 20 mice, 2 of 10 rats, and 2 of 7 hamsters. The mice died from the 3rd to the 11th calendar day with an LD_{50} being attained on the 7th day following the start of exposure. No deaths occurred among the dogs, rabbits, or guinea pigs. Weight response data showed that all species except the guinea pig were adversely affected. The rabbit lost 5% in weight, whereas the rat and hamster lost 11%. Clinical

chemical values indicated renal impairment and some subsequent regeneration in the rabbits. Much less serious kidney damage and hepatic injury in dogs was indicated from many chemical tests which included frequent analyses of the blood for sugar, NPN, urea nitrogen, amino acid nitrogen, bromsulfalein and serum protein. All of the urinary variables including amino acid nitrogen/creatinine ratio, sugar and protein were normal at all times. Hematologic results showed definite upward trends in the leukocytic count, notable the absolute neutrophil counts of the dogs, rats and rabbits during the second week of exposure. The other cellular blood elements gave no characteristic trend for any of the species. External symptoms varied somewhat with the species. Ocular opacity developed in the guinea pig, mouse and dog following 12 hours of exposure. Cutaneous lesions of varying size developed over the body of the dog, while the rats were found to have rales. The hamsters and rabbits manifested no external signs of beryllium damage. The histological findings showed the effect of absorption of beryllium sulfate tetrahydrate through the respiratory tract of the mouse, rabbit and rat to be pulmonary damage especially edema. This was not the type of injury, however, found in man. Additional lung lesions observed included inflammatory exudate in the lumina of the terminal bronchi and some foci of atelectasis of the rabbit, hemorrhage of the alveolar sacs of the hamster, and infiltration of neutrophils and monocytes in the lungs of rat. Hepatic injury was observed in mice dying during the first 9 days, but no lesions were noted thereafter, indicating rapid regeneration. Renal changes were found in the rabbit and rat but some regeneration of the tubular epithelium was observed in the rabbit kidneys. Marked species variation, but unusually good conformity within each species, was thus observed in the response to the inhalation of $BeSO_4 \cdot 4H_2O$. The sulfate ion, conferring a high acidity upon the molecule as a whole (with an approximate pH of 1.0 for the saturated solution), was felt to contribute significantly to the beryllium salt. Rats have been exposed by inhalation to beryllium metal fume at an approximate concentration of 800 mg/m^3 of air under a variety of exposure schedules to determine the character of the toxic response. Seven of 10 rats died of pulmonary hemorrhage following exposure to 24,000 CT units of fume administered as eight exposures of from 3 to 4 minutes each over a period of two hours. When the exposure was one-half this value, or 12,000 CT units, no rats died or showed other untoward response. Moreover, rats were found to tolerate 200,000 CT units or nearly 10 times the lethal dosage if administration of the fume was made at the rate of 4,000 units daily for the period of 60 days. Some reduction in growth rate, however, was noted on this schedule. It was concluded that beryllium metal fume acts as a primary irritant which, when administered rapidly in high dosage, may be fatal but which is tolerated relatively well as long as no single dose exceeds 12,000 CT units. No cumulative poisonous effects were seen.

PB 91897

Sulzberger, Marion B. and others.

Definitive (late) treatment of vesicular mustard gas lesions on human skin. Nov 1943. 3p table Mi $1.25 Ph $1.25

Experimental mustard gas lesions were produced on each arm of a series of human volunteers. After 24 hours, and at a time when large blisters occupied the sites of application of the mustard gas, the following different forms of treatment were compared: 1. Daily bandaging with 3% Vioform ointment. 2. Daily bandaging with boric acid ointment USP. 3. Daily bandaging with 5% sodium sulfadiazine ointment (Navy Issue). 4. Daily aspiration of vesicle and petrolatum bandaging. 5. Daily bandaging with petrolatum. 6. Debriding of vesicle top and daily bandaging with petrolatum. 7. Debriding of vesicle top, daily sprinkling with sulfathiazole micro crystals and daily bandaging with petrolatum. 8. Sterile gauze dressing changed once weekly. 9. Petrolatum dressing changed once weekly. Under the conditions of the experiment, there was no significant difference to be noted between the effects of these various forms of treatment.

PB 91910

Sulzberger, M. B. and others

Effect of applications of pyruvic acid starch paste on the rate of healing of mustard gas lesions. Sep 1944. 10p tables Mi $1.25 Ph $1.25

Under the conditions of the present experiments applications of pyruvic acid-starch paste (followed in many instances by succinic acid applications) to mustard gas lesions appeared to produce healing in a significantly shorter period than occurred in symmetrically situated lesions treated with either of two control ointments (5% sodium sulfadiazine ointment (Navy Issue) or petrolatum). Whole or partial removal of slough of mustard gas lesions with pyruvic acid-starch paste was obtained in 22 of 30 lesions. The pyruvic acid paste applications were begun 6 or 7 days after exposure to the vesicant. The average period of time necessary to remove the slough with pyruvic acid-starch paste treatment was about 8 days after the start of the applications and varied from 2 to 18 days. In 15 cases with partial or complete removal of slough, complete healing took place in an average of 36 days. There was wide variation in the rate, some sites healing at 28 days and others at 50 days. In 4 cases in which removal of slough was not definite, the average healing time was 35 days. In most subjects pyruvic acid paste was quite well tolerated for about 6 days by the normal skin surrounding mustard gas lesions. Continuation of the applications beyond the 6-day period frequently produced dermatitis and/or folliculitis which was occasionally sufficiently severe and progressive to preclude further use of the pyruvic acid paste. The resultant scar at the

but flat and softer than the scar on the control arm.

PB 91912

Sulzberger, Marion B. and others.

Effect of applications of various acids in starch paste on the rate of healing of chemical burns. Feb 1945. 12p tables Mi $1.75 Ph $2.50

In removing slough and in accelerating healing of chemical burns, 0.66 M mandelic acid, 0. 34 M lactic acid, 0.2 M tartaric acid and 0.14 M citric acid (all in starch paste) were at least as effective as 0.1 M pyruvic acid in starch paste. However, in general they often produced a prohibitive degree of dermatitis of the surrounding skin. 0.1 M mandelic acid, 0.1 M tartaric acid and 0.1 M citric acid were only slightly less effective than 0.1 M pyruvic acid and produced no more dermatitis than the pyruvic acid. 0.1 M lactic acid and 0.01 M hydrochloric acid were definitely less effective.

PB 91904

Sulzberger, Marion B. and others.

Effects of penicillin on mustard gas lesions on human skin. Committee on the treatment of gas casualties, Cornell University Medical College, Series B No. 16. Mar 1944. 3p Mi $1.25 Ph $1.25

Under the conditions of the experiments penicillin had slight, if any, beneficial effect on the course of the lesions produced and had no significant decontaminating effect on liquid mustard gas and mustard gas vapor lesions on human skin.

PB 91906

Sulzberger, M. B. and others.

Effects of preceding intramuscular injection of 10% solution of Bal on skin damage produced by liquid Lewisite in human volunteers. Apr 1944. 4p photo, tables Mi $1.25 Ph $1.25

In 6 of 12 human volunteers the preceding intramuscular injection of approximately 5 mg. Bal per Kg. of weight reduced the skin damage produced by the application of 1.4 mg. of liquid lewisite as compared with the skin damage produced by the same amount of lewisite applied to a symmetrically situated site 40 hours after the last administration of BAL.

PB 91895

Sulzberger, Marion B. and others.

A. Effects of pressure bandages on the progress of mustard gas lesions on human skin. B. Comparison of the effects of pressure bandages with boric acid ointment and 5% sulfathiazole ointment in the treatment of nine day old ulcerative liquid mustard gas lesions on human skin. Aug 1943. 2p Mi $1.25 Ph $1.25

Pressure bandages applied one hour after exposure of the human skin to 2.5 mg. of liquid mustard gas have no beneficial effect upon the progress of mustard gas lesions of human skin. Sluggish and secondarily infected ulcers, produced by the application of 2.5 mg. of liquid mustard gas on human skin, 9 days previously, were treated in comparative fashion with (1) boric acid ointment, and (2) 5% sulfathiazole ointment, both applied under sterile bandages with moderate pressure. Both forms of treatment exerted apparent beneficial effects. There was no difference in the efficacy of the two ointments.

PB 91896

Sulzberger, Marion B. and Baer, Rudolf L.

Experiments on the deliberate sensitization of human skin to bal. Supplementary report. Jun 1943. 6p tables Mi $1.25 Ph $1.25

The sensitivity produced was neither the classic eczematous-contact type of skin sensitivity nor the classic urticarial type. It differed in important respects from both of these common types and appeared to be an unusual form of skin sensitization. While the sensitivity did not remain strictly confined to the areas of previous exposure, there was evidence that in the majority of individuals the previously exposed area was more strongly sensitive than other parts of the skin. There was evidence suggesting that in exceptional cases the sensitivity may remain practically restricted to previously exposed parts. The sensitivity produced by BAL was not confined strictly to BAL, for the majority of sensitized individuals reacted also to patch tests with NDR-230 and NDR-287. There were no cross-reactions with NDR-293 or NDR-399, only very questionable evidence of possible cross-reaction with NDR-142, and still more questionable evidence of cross-reaction with NDR-131. (It is to be stressed that the fact that skin sensitized to BAL reacted to skin tests with NDR-230 and NDR-287 does not necessarily indicate that these two substances have the same sensitizing capacity as BAL).

PB 91911

Sulzberger, Marion B. and others.

Gas protective ointments in prevention of poison ivy dermatitis. Committee on the Treatment of Gas Casualties, Cornell University Medical College. Sep 1944. 9p photos Mi $1.25 Ph $1.25

A method for experimental testing of the relative value of protective ointments is described. The technique includes the use of a new device for preventing spread of the excitant beyond the test area being studied. Under the experimental conditions described, the Army Issue Gas Protective Ointment (M5) offers considerable protection against strong poison ivy extracts and against crushed poison ivy leaves and steams. This is to our knowledge the first report of the use of such a compound for this purpose. The protection afforded by M5 ointment is equal or slightly superior to that

afforded by the sodium perborate formula tested. Under the experimental conditions the protection afforded lasts at least 8 hours after application of the ointments. Field tests of M5 type ointment in protection against plant and other excitants appear to be warranted. The usefulness of such relatively non-irritating and stable yet strongly oxidizing ointments, may perhaps be extended to include protection against a large variety of common causes of contact-type dermatitis. Observations are presented which suggest that the repeated external applications of extracts of poison ivy cause some reduction in the general level of skin sensitivity to the plant allergens.

PB 91913

Sulzberger, Marion B. and others.

Investigations on vehicles to replace starch paste in the acid treatment of burns. Division 5-Committee on Medical Research, Cornell University Medical College; Series B No. 49. Aug 1945. 5p tables Mi $1.25 Ph $1.25

23 formulations of pyruvic acid, phosphoric acid and tartaric acid were employed in tests for slough removal on experimental thermal burns of human skin. The following formulations were as good as 0.1 M pyruvic acid in starch paste in regard to such essential properties as effectiveness of slough removal, speed of healing produced, and lack of irritancy:

1. 0.4 M Pyruvic acid in K-Y jelly
2. 0.4 M Phosphoric acid in K-Y jelly
3. Formula BM-13 (0.1 M pyruvic acid in a methocel-water gel)
4. Formula BM-19 (0.1 M pyruvic acid in a methocel-sorbitol water gel)
5. Formula BM-24 (0.1 M pyruvic acid in a pectin-Ringer's solution-glycerin gel)
6. Formula BM-38 (0.1 M phosphoric acid in a methocel-water gel)

The other formulations tested we. inferior to 0.1 M pyruvic acid starch paste in one or several of the three essential properties mentioned.

PB 91907

Sulzberger, M. B. and others.

Sensitization of human skin to lewisite. Apr 1944. 9p table Mi $1.25 Ph $1.25

Skin tests with dolutions of redistilled lewisite 1:1000 and 1:500 in mineral oil, olive oil and benzene were performed on a group of 35 human volunteers who had had relatively small experimental exposures (2.8 to 7.0 mg.) to liquid lewisite applied to relatively small skin areas. The same dilutions of lewisite were applied as skin tests to a control group of 23 men who had had no known previous exposures to lewisite. Lewisite 1:500 in mineral oil, 1:1000 in mineral oil and 1:500 in olive oil produced strongly positive reactions in both previously exposed and non-exposed volunteers, demonstrating that these solutions are primary irritants and unsuitable for testing for acquired sentitization to lewisite. Lewisite 1:1000 in olive oil, 1:500 in benzene and 1:1000 in benzene produced strongly positive reactions only in previously exposed volunteers, demonstrating that these solutions can be employed to test human volunteers for acquired sensitization to lewisite. 22 of 35 previously exposed volunteers could thus be shown to have an acquired densitization to lewisite. 12 of 13 volunteers who had had a flareup dermatitis eleven or more days after their first exposure to lewisite were shown to have an acquired sensitization to lewisite. Only 3 of these 13 volunteers were also shown to be hypersensitive to BAL. The acquired sensitization to lewisite in our volunteers was of the eczematous type. Dilutions of lewisite in mineral oil produced considerably more severe reactions than corresponding dilutions in olive oil. The possible practical significance of this finding is discussed.

PB 91909

Sulzberger, M. B. and others.

Sensitization of human skin to phenyldichlorarsine (with tests on cross-sensitization between phenyldichlorarsine and lewisite). Jul 1944. 8p tables Mi $1.25 Ph $1.25

Skin tests with dilutions of phenyldichlorarsine 1:100, 1:250, 1:500 and 1:1000 in benzene and with dilutions of redistilled lewisite 1:100, 1:250, 1:500 and 1:1000 in benzene were performed on: A. A control group of 9 human volunteers who had had no known previous exposure to any vesicant. B. A control group of 6 human volunteers who had had experimental exposure to mustard gas in vapor or liquid form. C. A group of 11 human volunteers each of whom had had experimental exposure to a total of 8 mg. of liquid phenyldichlorarsine applied to relatively small skin areas. D. A group of 10 human volunteers each of whom had had experimental exposure to a total of 8 mg. of liquid lewisite applied to relatively small skin areas. Phenyldichlorarsine 1:100 in benzene and lewisite 1:100 in benzene produced strongly positive reactions in both previously exposed and non-exposed volunteers, demonstrating that these solutions are primary irritants and unsuitable for testing for acquired sensitization to these vesicants. Phenyldichlorarsine 1:250, 1:500 and 1:1000 in benzene produced positive eczematous reactions only in volunteers previously exposed to phenyldichlorarsine or to lewisite, demonstrating that these solutions can be employed to test human volunteers for acquired sensitization to phenyldichlorarsine. 9 of 11 volunteers previously exposed to phenyldichlorarsine were thus shown to have an acquired eczematous sensitization to phenyldichlorarsine. Lewisite 1:250, 1:500 and 1:1000 in benzene produced positive eczematous reactions only in volunteers previously exposed to lewisite or to phenyldichlorarsine demonstrating that these solutions can be employed to test human volunteers for acquired sensitization to lewisite. 5 of 10 volunteers previously exposed to lewisite were thus shown to have an acquired eczematous sensitization

to lewisite. 7 of 11 volunteers who had previously been exposed to *phenyldichlorarsine* were shown to have acquired an eczematous sensitization to *lewisite*. 3 of 10 volunteers who had previously been exposed to *lewisite* were shown to have acquired an eczematous sensitization to *phenyldichlorarsine*.

PB 91900

Sulzberger, Marion B. and Baer, Rudolf L.

Skin tests with dilutions of mustard gas and the determination of levels of sensitivity in normal individuals and in those experimentally exposed to relatively small amounts of liquid mustard gas. Nov 1943. 9p tables MI $1.25 Ph $1.25

Skin tests with 1:100,000, 1:10,000, 1:1,000 and 1:500 dilutions of redistilled Levinstein mustard gas in dry benzene were performed on a group of 27 men who had had a single relatively small (mainly 1.6 to 5.2 milligrams) experimental exposure to undiluted liquid mustard gas applied to relatively small skin areas (1/2 of the above amounts to each forearm). The same dilutions were applied as skin tests to a control group of 68 men who had had no known previous exposures to mustard gas. The results showed that a high percentage of the men previously exposed had acquired a skin hypersensitivity to mustard gas. This hypersensitivity was apparent not in an increased number of reactions to the 2 higher dilutions, but in an increased number of stronger reactions to the 2 higher concentrations. In a small group of men who had been experimentally exposed 8 days prior to the skin tests, there was a marked increase of sensitivity as compared with the level in the non-exposed group; but a much lesser degree of sensitivity than in a group of men skin tested four or more weeks after experimental exposure. This suggests that at 8 days the sensitivity is already present, is probably on the increase, but has not yet reached its maximum. The skin test method using benzene dilutions presents a rapid and satisfactory means for establishing levels of sensitivity among groups or in individuals. Our results with this method were successful in demonstrating an acquired hypersensitivity to the 1:1,000 or 1:500 dilution, as evident in the increased number of reactions which are greater than simple erythema (i.e. edema, elevation, papules, etc.). These results differ in degree (but not in principle) from those reported by investigators in Great Britain. Some possible causes of the quantitative differences are discussed.

PB 91908

Sulzberger, M. B. and others.

Tests on the sensitivity of whites and nisei to mustard gas and lewisite (including tests for allergic sensitization to mustard gas following experimental exposure). Jun 1944. 27p tables MI $2.00 Ph $3.75

Drop tests were performed on 40 white and 39 nisei volunteers for their sensitivity to mustard gas and lewisite. In the tests for sensitivity to mustard gas the dilutions used were: Mustard gas in benzene 1:100; Mustard gas in benzene 1:250; Mustard gas in benzene 1:500; Mustard gas in benzene 1:1000; Mustard gas in benzene 1:5000. There was no significant difference in the sensitivity of white and nisei volunteers to mustard gas. In a second series of tests 19 to 20 days after their first exposure, none of the volunteers showed evidence of allergic sensitization to mustard gas. During this second test series, comparisons were also made between the sensitivity of the back which had been exposed to mustard gas vapor and the buttocks which had presumably not been exposed (i.e. covered with impregnated shorts). In about 25% of the white volunteers the buttock area was less sensitive than the back area. In 50% of the nisei volunteers the buttock area was less sensitive than the back area. In the tests for sensitivity to lewisite, the dilutions used were: lewisite in benzene 1:100; lewisite in benzene 1:250; lewisite in benzene 1:500; lewisite in benzene 1:1000. There was no significant difference in the sensitivity of white and nisei volunteers to lewisite. In a second series of tests 19 to 20 days after their first exposure, only one white volunteer and none of the nisei volunteers showed evidence of allergic sensitization to lewisite.

PB 93457

Voegtlin, Carl

Toxicity of certain heavy metal carbonyls—Ni(Co)4, Mo(CO)6, W(CO)6, Cr(CO)6. Mar 1945. 3p table MI $1.25 Ph $1.25 (Limited supply available mimeo $.05) (Also available from U. S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo $.05)

I. MDDC 1070

$Ni(CO_4)$ has a relatively high toxicity. The symptons, pathological findings, diagnosis and treatment are reviewed. Recommendations are made for prevention of damage. The industrial use of $Mo(CO)_6$, $W(CO)_6$, and $Cr(CO)_6$ should not present any serious health hazards if the operation does not involve temperatures exceeding ordinary atmosphere conditions and the inhalation of the compound in the form of dust. As the toxicity of Cr, Mo and W in ionized compounds, it should be remembered that Cr as chromic acid can produce perforation of the nasal septum and other local reactions. The toxicity of Mo and W as shown by a few experiments on animals may be regarded as relatively low. There is no evidence of industrial tungsten poisoning in spite of its extensive use. The heavy metal alkyls $Pb(CH_3)_4$, $Zn(CH_3)_2$, $Sn(CH_3)_4$ are absorbed from the lungs and chronic poisoning results. Proper precautions should be taken to avoid exposure of workers to the vapors of these alkyl metal compounds.

PB 90968

Wiegand, Charles and Merkel, E.

Contribution to the determination of Cis-and trans-configuration. Is pigmentation of the human skin by solar radiation possible without erythema?

1934-1938. 21f graphs (Text in German or English) Ml $2.00 Enl Pr $5.00
Referred to on p. 20 of BIOS FR 736, Item 9 (PB 52875)
For abstract, see PB 90968s 2p Ml $1.25 Ph $1.25
1. Color of man—Germany 2. Isomerism—Germany 3. I. G. Farbenindustrie A. G., Elberfeld, Ger. 4. BIOS FR 736, Item 9 LD

METALS AND METAL PRODUCTS

PB 92389

Bick, V. R. and Tabor, D.
Effect of abrasive on the wear behaviour of sliding steel surfaces. Mar 1945. 25p diagrs, graphs, tables Ml $2.00 Ph $3.75
1. Steel—Properties—Australia 2. Abrasives—Australia

PB 92360

Bowden, Philip and Horner, H. W.
Manufacture of copper lead bearings. Nov 1940. 7p photos, tables Ml $1.25 Ph $1.25
1. Metals, Bearing—Copper alloys—Australia 2. Bearings—Manufacture—Australia

PB 92174

British Intelligence Objectives Sub-Committee
Glossary of technical terms as used in the metal industry. Vol. 1. n.d. 14p Ml $1.75 Ph $2.50
1. Metal industries—Dictionaries

PB 92175

British Intelligence Objectives Sub-Committee
Glossary of technical terms as used in the metal industry. Vol. 2. n.d. 32p Ml $2.25 Ph $5.00
1. Metal industries—Dictionaries

PB 92176

British Intelligence Objectives Sub-Committee
Glossary of technical terms as used in the metal industry. Vol. 3a. n.d. 19p Ml $1.75 Ph $2.50
1. Metal industries—Dictionaries

PB 92177

British Intelligence Objectives Sub-Committee
Glossary of technical terms as used in the metal industry. Vol. 3. B-D. n.d. 39p (Text in German) Ml $2.25 Ph $5.00
1. Metal industries—Dictionaries—Germany 2. German language—Glossaries, vocabularies, etc.—English

PB 92180

British Intelligence Objectives Sub-Committee
Glossary of technical terms of the light metal industry. n.d. 22p Ml $2.00 Ph $3.75
1. Metal industries—Dictionaries

PB 92864

Collins, John J.
Copper in Japan. Apr 1948. 95p photos, graphs, maps (2 fold), tables Ml $4.25 Ph $12.50
1. Copper—Japan

PB 91700

Cooper, C. and others
German hardened and tempered steel strip industry. (BIOS final report 1673, item 21). Jan 1947. 111p Ml $4.75 Ph $15.00
A useful cross section of German practice was obtained and while raw materials and general processing details were examined as fully as possible most attention was paid to hardening and tempering methods. Supplementary information will be found in BIOS Final Rept No. 681, Item 21: PB 45241, v. 3, p. 955, and BIOS Final Rept No. 1256, Item 36: PB 79447, v. 7, p. 695, this Bibliography. The investigation was specifically directed to the collection of technical information but points of interest on other relevant matters are included in the report. Tables, drawings and photographs are attached.

PB 92134

Day, J. W.
Forty-pound special treatment steel under tee bend. Welding test 183. Jun 1940. 10p photos, drawings, tables Ml $1.25 Ph $1.25
1. Steel welds—Tests 2. Welds—Tests 3. Steel—Bending tests

PB 92133

Day, J. W.
Effect of welding on the physical properties of special treatment steel. Welding test 171-A. Apr 1941. 11p photos, drawings, graphs, tables Ml $1.75 Ph $2.50
1. Welds—Tests 2. Steel welds—Tests 3. Steel—Welding

PB 92144

Day, J. W.
Effects of welding on the properties of STS. Welding test no. 171. Aug 1939. 8p photos, drawings, tables Ml $1.25 Ph $1.25
1. Welds—Tests 2. Steel—Welding

PB 92143

Day, J. W.
Experimental thermit welding of lower roller tracks static tensile test. U.S.S. South Dakota (BB57). Aug 1939. 5p photos, drawings, tables Ml $1.25 Ph $1.25
1. Steel castings—Welding 2. Welding, Thermite 3. U.S.S. South Dakota 4. Roller paths

PB 92148

Day, J. W.
Investigation of welded butts and seams in S.T.S. subjected to ballistic impact. Report of

tensile and bend tests. Welding test no. 170. Apr 1939. 13p photos, tables Mi $1.75 Ph $2.50
1. Welds—Tests 2. Welds, Butt 3. Seams, Welded—Tests

PB 92139

Day, J. W.
Investigation of welded butts and seams in S.T.S. subjected to ballistic impact. Report on tensile tests of cladded specimens. Welding test 170. Supplement. Nov 1939. 6p photos, drawings, tables Mi $1.25 Ph $1.25
1. Welds—Tests 2. Steel welds—Tests 3. Welds, Butt

PB 92145

Day, J. W.
Investigation to determine the physical properties of CRS joints welded with grade EA electrodes. Welding test no. 178. Jun 1939. 7p photos, drawings, tables Mi $1.25 Ph $1.25
1. Joints, Welded—Physical properties 2. Welds—Tests 3. Welding—Electrodes

PB 92146

Day, J. W.
Investigation to determine the value of the bond between cladding and plate of nickel-clad plate when welded. Welding test no. 175. Apr 1939. 10p photos, drawings, tables Mi $1.25 Ph $1.25
1. Welds, Butt 2. Steel plates, Nickel-clad

PB 92128

Day, J. W.
Physical characteristics of welded longitudinal seams. Welding test 206. Mar 1943. 30p photos, diagrs, graphs, tables Mi $2.00 Ph $3.75
1. Steel welds—Tests 2. Seams, Welded—Characteristics 3. Welds—Tests

PB 92132

Day, J. W.
Physical characteristics of welded longitudinal seams preliminary investigation. Welding test 206. Apr 1941. 6p photos, drawing, table Mi $1.25 Ph $1.25
1. Welds—Tests 2. Seams, Welded—Tests 3. Steel plates—Stiffeners—Tensile tests

PB 92131

Day, J. W.
Scalloped grooved butt joints in special treatment steel. Welding test 238. Aug 1941. 5p photos, drawings, table Mi $1.25 Ph $1.25
1. Welds, Butt 2. Welds—Tests 3. Joints, Welded—Tensile tests 4. Steel welds—Tests

PB 92136

Day, J. W.
STS cylinders subjected to explosive impact. Welding test 194. Mar 1940 28p photos, drawings, graphs, tables Mi $2.00 Ph $3.75
1. Welds—Tests 2. Cylinders, Steel—Tests

PB 92137

Day, J. W.
S.T.S. cylinders subjected to explosive impact. Welding test 194. Supplement. May 1940. 8p photos, drawing, graph, tables Mi $1.25 Ph $1.25
1. Welds—Tests 2. Cylinders, Steel—Tests

PB 92130

Day, J. W.
STS cylinders subjected to explosive impact. (Second supplement). Welding test 194. Jan 1942. 16p photos, drawings, graphs, tables Mi $1.75 Ph $2.50
1. Steel welds—Tests 2. Cylinders, Steel—Tests 3. Welds—Tests 4. Steel plates—Stiffeners—Tensile tests

PB 92135

Day, J. W.
Tensile strength of welded joints in special treatment steel with 25-20 electrodes. Welding test 196. May 1940. 42p photos, drawings, graphs, tables Mi $2.50 Ph $6.25
1. Welds—Tests 2. Steel welds—Tests 3. Joints, Welded

PB 92141

Day, J. W.
Tensile strength of welded joints with high width-thickness ratios. Welding test no. 180. High tensile steel. Dec 1939. 33p photos, drawings, tables Mi $2.25 Ph $5.00
1. Welds—Tests 2. Steel welds—Tests 3. Joints, Welded—Tensile tests

PB 92129

Day, J. W.
Welded butt straps in special treatment steel static tensile tests. Welding test 220. May 1942. 17p photos, drawings, tables Mi $1.75 Ph $2.50
1. Steel welds—Tests 2. Steel straps

PB 91317

Deutsche Edelstahlwerke A. G., Krefeld, Ger.
Catalogues and technical data on steel. 1930-1944. 830f graphs (Text in German) Mi $9.00 Enl Pr $107.50
For abstract see PB 91317s 4p Mi $1.25 Ph $1.25
1. Steel—Metallurgy—Germany 2. Steel alloys—Germany

PB 90992

Deutsche Edelstahlwerke A. G., Krefeld, Ger.
Trademark-register of steels. 1901-1945. 54f (Text in German) Mi $2.75 Enl Pr $8.75
See also Micro BIOS FD 1897/45 (PB 90991) and Micro BIOS FD 1682/45 (PB 90787)
For abstract see PB 90992s 1p Mi $1.25 Ph $1.25
1. Steels—Germany 2. Trade-marks—Germany

PB 20843s

Deutsche Gold- und Silberscheideanstalt, Frankfurt am Main, and others.

Patents and patent applications on powder metallurgy, 1938-1944. Feb 1946. 6p (Text in German and English) Mi $1.25 Ph $1.25

Index to Micro FIAT MM 118, Frames 1-216 (PB 20843)

PB 73592s2

Deutsche Röhrenwerke, A. G., Versuchsanstalt, Mühlheim, Ger.

Metallurgical test reports of pipes and tubes. 1937-1945. 7p Mi $1.25 Ph $1.25

1. Micro FIAT M 17, Frames 1681-2258, abstract

PB 74915s

Dortmund Hoesch A. G., Dortmund, Ger.

Investigations made by the Research Institute of the Hoesch A. G., Dortmund. 1937-1940. 2p Mi $1.25 Ph $1.25

1. Metallurgy—Research—Germany 2. Reneusil (Trade name) 3. Novar (Trade name) 4. Micro FIAT T 42, Frames 733-1637, abstract

PB 93496

Fulmer Research Institute Ltd. and others.

Extrusion of light alloys at I. G. Farbenindustrie, Bitterfeld; interrogation of Herr K. F. Brauninger. Jun 1947. 59p drawings Mi $2.75 Ph $7.50

1. Aluminum Development Association, Gt. Brit. 2. Birmetals Ltd., Gt. Brit. 3. I. G. Farbenindustrie A. G., Bitterfeld, Ger. 4. Brauninger, K. F. 5. Extrusions—Forming—Germany 6. Extrusion presses—Germany 7. Aluminum alloys—Extrusion—Germany 8. BIOS FR 1656, Item 21

PB 90759

Fusor Präzisions-Spritz- und Pressguss G.m.b.H., Berlin.

Fusion castings, alloys and their uses. 1939. 5f tables (Text in German) Mi $1.25 Enl Pr $2.50

For abstract see PB 90759s 1p Mi $1.25 Ph $1.25

1. Die casting—Germany

PB 74091s

Germany. Physikalisch-Technische Reichsanstalt.

Miscellaneous documents on gear cutter, lubrication, electric contacts and lacquered wire. 1935-1944. 3p Mi $1.25 Ph $1.25

1. Micro FIAT CC 179, Frames 1-1000, abstract

PB 92391

Honeycombe, R. W. K. and Liefman, A. H.

Influence of tin on copper-lead alloys. Feb 1945. 16p photos, drawings, graphs, tables Mi $1.75 Ph $2.50

1. Copper-lead alloys—Australia 2. Bearings, Copper-lead—Australia 3. Metals, Bearing—Copper-lead—Australia

PB 27713s2

Hrubesch (Dr.) and Friedmann (Dr.)

Technisch durchführbare oberflächenmetallisierungsverfahren. (Technical metal coating of surfaces). Jul 1944. 8p tables (Text in German) Mi $1.25 Ph $1.25

Supplement 2 to PB 27713

For translation see PB 27713s2t

1. Adipic acid—Synthesis—Germany 2. Coatings, Metalic—Germany 3. Reppe synthesis—Germany 4. I. G. Farbenindustrie A. G., Ludwigshafen, Ger.

PB 20862s

I. G. Farbenindustrie A. G., Ludwigshafen, Ger.

Lectures given at meetings of the Metals Sub-Commission, 1939-1944. Feb 1946. 9p (Text in German and English) Mi $1.25 Ph $1.25

Index to Micro FIAT MM 106, Frames 1-929 (PB 20862)

PB 17693s

Joint Intelligence Objectives Agency.

Papers pertaining to bearings based on zinc alloys. Feb 1946. 1p (Text in German and English) Mi $1.25 Ph $1.25

Index to Micro FIAT MM 117, Frames 1-140 (PB 17693)

PB 4685s

Joint Intelligence Objectives Agency.

Selected books requested for microfilming on welding and aluminum surface protection. Nov 1945. 2p Mi $1.25 Ph $1.25

Index to Micro FIAT MM 18 (PB 4685)

PB 17653s

Joint Intelligence Objectives Agency.

Selected books requested for microfilming on working of metals, powder metallurgy and metal analysis. Jan 1946. 1p (Text in German and English) Mi $1.25 Ph $1.25

Index to Micro FIAT MM 56, (PB 17653)

PB 82031s

Kaiser Wilhelm Institut für Eisenforschung, Düsseldorf, Ger.

Research reports on iron and steel production. (Abstract). 1940-1944. 3p Mi $1.25 Ph $1.25

PB 91357

Krupp, Friedrich A. G., Essen, Ger.

Krupp's technical news. 5. v. 1938-1943. 1093f diagrs, graphs, tables (Text in German) Mi $9.00 Enl Pr $142.50

For abstract see PB 91357s 1p Mi $1.25 Ph $1.25

1. Periodicals—Germany 2. Metallurgy—Research—Periodicals—Germany

PB 91021

Krupp, Friedrich A. G., Essen, Ger.

Metallographic research on widia steels 1938-1939. 85f photos, tables (Text in German) Mi $3.75 Enl Pr $12.50

For abstract see PB 91021s 2p Mi $1.25 Ph $1.25
I. Widia—Germany 2. Micro BIOS FD 1974/46, Frames 1-75

PB 25603s

Krupp, Friedrich A. G., Essen, Ger.
Reports on practical and theoretical metallurgical problems. Jan 1946. 12p (Text in German and English) Mi $1.75 Ph $2.50
Index to Micro FIAT MM 95, Frames 1051-1989 (PB 25603)

PB 91022

Krupp, Friedrich A. G., Essen, Ger.
Widia steels and their products. 1927-1944. 173f photos, tables Mi $6.50 Enl Pr $23.75
For abstract see PB 91022s 4p Mi $1.25 Ph $1.25
I. Widia—Germany 2. Micro BIOS FD 1975/46, Frames 1-163

PB 44959s

Kupferhütte Ertel, Bieber & Co., Hamburg, Ger.
Falltrommel 25 M^3 (drawing no. 487054). Nov 1937. 8p drawing only Mi $1.25 Ph $1.25
Legends in German
Supplement 1 to PB 44959
Referred to on p. 25 of FIAT FR 829 (PB 44959)
A portion of this drawing is reproduced as sketch no. 2, p. 16, FIAT FR 829 (PB 44959)

PB 92376

Moore, A. J. W.
Comparison of some Australian chrome-plating with chrome-plating as produced by the Van Der Horst process. Sep 1942. 7p photos, tables Mi $1.25 Ph $1.25
I. Plating, Chromium—Australia

PB 93499

Plaster, H. J. and others.
German metal spraying techniques. May 1946. 87p Mi $3.75 Ph $11.25
I. Metals—Spraying—Germany 2. Metallisator A. G., Berlin 3. BIOS FR 1541, Item 21

PB 92147

Roop, W. P.
Tests to determine efficacy of welding procedure. USS South Dakota (BB57). Jun 1939. 9p photo, drawings, tables Mi $1.25 Ph $1.25
I. Welds—Tests 2. Steel plates—Welds—Tests

PB 20108s

Schramm, Jakob and Mohrnheim, Anton
Die aushärtung von eisen-zink- und kobalt-zink legierungen. (Tempering of iron-zinc and cobalt-zinc alloys). Dec 1940. 2p (Text in English) Mi $1.25 Ph $1.25

PB 90757

Silumin Gesellschaft m.b.H., Frankfurt am Main, Ger.
Silumin alloys. 1942-1944. 36f tables, photos (Text in German) Mi $2.25 Enl Pr $6.25
For abstract see PB 90757s 2p Mi $1.25 Ph $1.25
I. Silumin—Germany

PB 91359

Spectro-analytical and X-ray methods for testing light metal alloys with special equipment. 1940-1943. 16f photos, tables (Text in German) Mi $1.75 Enl Pr $3.75
For abstract see PB 91359s 2p Mi $1.25 Ph $1.25
I. Metals—Tests—Germany

PB 92392

Spink, J. and Tabor, D.
Frictional and wear properties of five aircraft alloys. Aug 1944. 10p photos, tables Mi $1.25 Ph $1.25
I. Metals—Friction—Australia 2. Aluminum alloys—Properties—Australia 3. Steel alloys—Properties—Australia

PB 92387

Stone, M. A. and Tabor, D.
Effect of abrasive particles on the incidence of visual hot spots between rubbing surfaces. Aug 1945. 9p graphs, tables Mi $1.25 Ph $1.25
I. Metals—Friction—Australia

PB 92382

Tabor, D.
Effect of plating conditions on the wear properties of chromium plating, and the effect of temperature. Feb 1943. 10p photos, graph, tables Mi $1.25 Ph $1.25
I. Plating, Chromium—Wear—Australia

PB 92352

Tabor, D.
Note on the frictional properties of Australian porous bronze bearing metals and a similar English "Oilite". May 1944. 4p graph, tables Mi $1.25 Ph $1.25
I. Oilite (Trade name) 2. Metals, Bearing—Analysis—Australia

PB 92415

Tabor, D.
Wear properties of chromium plating. Aug 1942. 8p photos, graphs, table Mi $1.25 Ph $1.25
I. Plating, Chromium—Wear—Australia 2. Coatings, Chromium—Australia

PB 21235r

U. S. Air Force and U. S. Navy Dept.
Cable: Single strand non-flexible carbon steel (preformed). Air Force-Navy aeronautical specification. Jun 1948. 9p tables Mi $1.25 Ph $1.25

PB 93653

U. S. Air Force and U. S. Navy Dept.
Cable: Steel (carbon), flexible, performed. Air Force-Navy aeronautical specification. Jul 1948 12p drawings, tables Mi $1.75 Ph $2.50
1. Cables, Steel

PB 21499r

U. S. Air Force and U. S. Navy Dept.
Magnesium alloy: Die castings. Air Force-Navy aeronautical specification. May 1948. 7p drawings, tables Mi $1.25 Ph $1.25

PB 93320

U. S. Air Force and U. S. Navy Dept.
Nail-flat head. Air Force-Navy aeronautical standard. Jun 1948. 1p tables Mi $1.25 Ph $1.25
1. Nails—Specifications

PB 93322

U. S. Air Force and U. S. Navy Dept.
Pin. Escutcheon. Air Force-Navy aeronautical standard. Jul 1948. 1p drawing, table Mi $1.25 Ph $1.25
1. Pins—Specifications

PB 21567a2

U. S. Air Force and U. S. Navy Dept.
Plating: Chromium. Air Force-Navy aeronautical specification. May 1948. 2p Mi $1.25 Ph $1.25

PB 26043r4

U. S. Air Force and U. S. Navy Dept.
Plug and bleeder-screw thread. Air Force-Navy aeronautical standard. Apr 1948. 1p drawings, tables Mi $1.25 Ph $1.25

PB 26099r8

U. S. Air Force and U. S. Navy Dept.
Plug-square head pipe thread. Air Force-Navy aeronautical standard. Jun 1948. 1p drawings, table Mi $1.25 Ph $1.25

PB 25952r4

U. S. Air Force and U. S. Navy Dept.
Rivet: Flat head aluminum alloy. Air Force-Navy aeronautical standard. Apr 1948. 1p drawings, tables Mi $1.00 Ph $1.00

PB 25950r5

U. S. Air Force and U. S. Navy Dept.
Rivet: Round head aluminum alloy. Air Force-Navy aeronautical standard. Apr 1948. 1p drawing, tables Mi $1.00 Ph $1.00

PB 67997r

U. S. Air Force and U. S. Navy Dept.
Rivet: Universal head aluminum alloy. Air Force-Navy aeronautical standard. Apr 1948. 1p drawings, tables Mi $1.25 Ph $1.25

PB 25954r4

U. S. Air Force and U. S. Navy Dept.
Rivet-brazier head aluminum alloy. Air Force-Navy aeronautical standard. Apr 1948. 1p drawings, tables Mi $1.25 Ph $1.25

PB 93656

U. S. Air Force and U. S. Navy Dept.
Steel: Chrome-vanadium (6150) sheet and strip. Air Force-Navy aeronautical specification. Jun 1948. 7p tables Mi $1.25 Ph $1.25
1. Sheet steel, Chromium-vanadium 2. Steel, Chromium-vanadium

PB 21684r

U. S. Air Force and U. S. Navy Dept.
Steel: Corrosion-resisting (18Cr-8Ni), bars and rods. Air Force-Navy Aeronautical specification. May 1948. 8p tables Mi $1.25 Ph $1.25

PB 91786

U. S. Air Force
Steel: Welding, machining, and forming corrosion-resisting steels and nickel chromium iron alloy. Mar 1948. 5p tables Mi $1.25 Ph $1.25
1. Steel—Welding 2. Steel, Corrosion resistant 3. Iron-nickel-chromium alloys

PB 92456

U. S. Air Force and U. S. Navy Dept.
Tee-flared tube: Internal thread on run. Air Force-Navy aeronautical standard. Apr 1948. 1p drawings, table Mi $1.25 Ph $1.25
1. Tubes, Flared—Design

PB 92458

U. S. Air Force and U. S. Navy Dept.
Tee-flared tube: Internal thread on side. Air Force-Navy aeronautical standard. Apr 1948. 1p drawing, table Mi $1.25 Ph $1.25
1. Tubes—Flared—Design

PB 93316

U. S. Air Force and U. S. Navy Dept.
Thermocouple leads: Chromel and alumel. Installation of. Jun 1948. 1p drawing Mi $1.25 Ph $1.25

PB 21728r

U. S. Air Force and U. S. Navy Dept.
Tie rods: Streamline, round and square. Air Force-Navy aeronautical specification. Jul 1948. 11p drawing, tables Mi $1.75 Ph $2.50

PB 21770r

U. S. Air Force and U. S. Navy Dept.
Tubing, Chrome-molybdenum (4130) steel welded. Air Force-Navy aeronautical specification. May 1948. 8p tables Mi $1.25 Ph $1.25

PB 92977

U. S. Air Force and U. S. Navy Dept.
Welding: Flash, carbon and alloy steel. Air Force-Navy aeronautical specification. May 1948. 11p diagrs, graphs Mi $1.75 Ph $2.50
1. Welding, Flash—Steel

PB 93651

U. S. Air Force and U. S. Navy Dept.
Wire: Thermocouple lead. Air Force-Navy aeronautical bulletin. Jul 1948. 1p table Mi $1.25 Ph $1.25
1. Wire, Thermocouple lead

PB 92138

Vane, F. F., Jr.
Investigation to determine the physical properties of partially grooved tee joints made with grade EA electrodes. Tension, shear, and bend tests. Welding test no. 181. Nov 1939. 10p drawings, tables Mi $1.25 Ph $1.25
1. Welds—Tests 2. Joints, Welded—Tests

PB 92140

Vane, F. F., Jr.
Investigation to determine the influence of welding on high tensil steel. Welding test no. 161. Nov 1939. 2p tables Mi $1.25 Ph $1.25
1. Welds—Tests 2. Steel welds—Tests 3. Steel—Physical properties 4. Steel—Chemical properties

PB 92142

Vane, F. F., Jr.
Investigation to determine the physical properties of welded STS butt joints. Welding test no. 184 and welding test no. 185. Oct 1939. 12p photos, drawings, tables Mi $1.75 Ph $2.50
1. Welds—Tests 2. Steel welds—Tests 3. Joints, Welded—Physical properties

PB 91356

Verein Deutscher Eisenhüttenleute, Düsseldorf, Ger.
Principles and examples for the iron and related branches of industry. 1941. 74f diagrs (Text in German) Mi $3.50 Enl Pr $11.25
For abstract, see PB 91356a 2p Mi $1.25 Ph $1.25
1. Iron and steel industry—Costs—Germany

PB 70022a2

Vereinigte Aluminumwerke A. G., Lausitz, Ger.
Aluminum research. 1940-1944. 3p Mi $1.25 Ph $1.25
1. Micro FIAT G 12, Frames 18831-19122, abstract

PB 92364

Worner, H. W.
Effects of the presence of copper on the structure and properties of the silver in centrifugally cast silver bearings. Mar 1941. 5p Mi $1.25 Ph $1.25
1. Metals, Bearing—Silver alloys—Australia

PB 92362

Worner, H. W.
Examination of two copper-lead alloys manufactured overseas. Examination of three tin-base bearing metals. May 1941. 12p photos Mi $1.75 Ph $2.50
1. Metals, Bearing—Tin alloys—Australia
2. Metals, Bearing—Copper alloys—Australia

PB 92357

Worner, H. W.
X-ray examination of some American silver lead bearings. Corrosion of some unused American bearings. Dec 1940. 11p photos Mi $1.75 Ph $2.50
1. Metals, Bearing—Silver alloys—Australia
2. Bearings—X-ray inspection—Australia

METEOROLOGY AND CLIMATALOGY

PB 92838

Anderson, Nils G.
Documents (on meteorology) selected for microfilming at Reichshof Hotel, Bad Kissingen, Germany. n.d. 110p Mi $4.50 Ph $13.75
1. Meteorology—Bibliography—Germany

PB 93289

Nomura, Ken'ichi
Meteorological consideration on the locality of the outbreak type of insect-pests in Japan. n.d. 2p map, table Mi $1.25 Ph $1.25
1. Insects—Geographical distribution—Japan
2. Central Meteorological Observatory, Tokyo

PB 89670t

Yoshida, J.
Electricity produced by rubbing or breaking of ice and the origin of lightning electricity. (Abridged translation of PB 89670). n.d. 6p Mi $1.25 Ph $1.25

MINERALS AND MINERAL PRODUCTS, INCLUDING STONE, CLAY AND GLASS

PB 92032

Blackburn, A. R.
Effect of sintering conditions on the physical properties of "cermet" bodies containing chromium and alumina. Dec 1947. 9p graph, tables Mi $1.25 Ph $1.25
1. Ceramic materials—Tests 2. Alumina, Sintered 3. Chromium—Sintering

PB 92865

Harrington, J. F.
Sources of bauxite in Asia. Jun 1948. 41p maps, photos, tables, drawing Mi $2.50 Ph $6.25
1. Bauxite—Extraction—Asia 2. Bauxite—Sources—Asia

PB 88845

Knight, Edmund H.

Manufacture of technical ceramics in Germany for the chemical industry. Jul 1948. 27p photos, diagrs, tables Mimeo: $.75

I. Ceramics—Germany 2. Chemical industries—Germany 3. FIAT FR 1275

PB 91014

Krupp, Friedrich A. G., Essen, Ger.

Properties of pressed and sintered powdered coal and graphite. 1944. 40f graphs, tables Mi $2.25 Enl Pr $6.25

For abstract see PB 91014s 2p Mi $1.25 Ph $1.25

I. Coal, Pulverized—Germany 2. Graphite—Properties—Germany

PB 25618s

New developments in the field of glass, cement, mortars, and other ceramic materials, particularly of blast furnace slags. Mar 1946. 5p (Text in German and English) Mi $1.25 Ph $1.25

Index to Micro FIAT MM 175, Frames 1-787 (PB 25618)

PB 93597

U. S. Office of Technical Services.

Industrial Research and Development Division.

Evaluation of North Carolina raw materials for the production of Portland cement. Final report under contract no. Cac-47-12. Jun 1948. 76p photos, tables, diagrs, map Mi $3.50 Ph $10.00 Mimeo: $2.00

I. North Carolina. State college, Raleigh 2. Limestone—North Carolina 3. Shale—North Carolina 4. Cement industry—North Carolina

ORDNANCE AND ACCESSORIES

PB 92875

British Intelligence Objectives Sub-Committee

Checking calculations pertaining to the attempt to measure distance—time. n.d. 110p graphs, tables Mi $4.50 Ph $13.75

I. Distances—Measurements—Germany 2. Time—Measurements—Germany 3. Trajectory determination—Germany 4. Projectiles—Trajectories—Germany

This report consists of exterior ballistics calculations made with E2 (10.6g), E4(11.7g) and E1 (13.0g) German projectiles. Battery performance was determined in tests during which approximately 400 shots were fired per round. Data tables and graphs are included

PB 92183

British Intelligence Objectives Sub-Committee

General German-English vocabulary on ordnance. n.d. 34p Mi $2.25 Ph $5.00

I. Ordnance—Dictionaries

PB 92182

British Intelligence Objectives Sub-Committee

German-English abbreviations on small arms. n.d. 18p Mi $1.75 Ph $2.50

I. Small arms—Dictionaries

PB 92181

British Intelligence Objectives Sub-Committee

Glossary of German words used on drawings and in descriptive texts of stabilization gear. n.d. 56p Mi $2.75 Ph $7.50

I. Ordnance—Dictionaries

PB 92891

British Intelligence Objectives Sub-Committee

Ordnance offices of the three services, and the armament ministry. (Historical outline). n.d. 8p Mi $1.25 Ph $1.25

I. Armament industry—Germany 2. Ordnance—Germany 3. Military organisations—Germany 4. Germany. Heereswaffenamt—History 5. Germany. Oberkommando das Herres—History

PB 92184

British Intelligence Objectives Sub-Committee

Worterbuch von deutschen Geraete-bezeichnungen. (Glossary of German Ordnance Terms). n.d. 19p Mi $1.75 Ph $2.50

I. Ordnance—Dictionaries

PB 92876

Deutsche Waffen—und Munitionsfabriken A. G., Lübeck, Ger.

Flash time-recorder according to Boetz, with direct indication of the result of measuring. Jul 1942. 20p photos, drawings Mi $1.75 Ph $2.50

I. Recorders, Time interval—Germany 2. Recorders, Distance—Germany 3. Photography, Ballistic—Germany 4. Cameras, Ballistic—Germany 5. Trajectory determination—Germany

The new flash-time recorder allows measurements of time of about 10^{-3}s with an average quadratic error of about 0.5% and has the following advantages against other short time recorders: 1) fast and simple measuring with economical film and paper consumption; 2) high accuracy; 3) fast control during each measurement series; and 4) measurement of longer times by use of a drum which is geared down. An English translation of a report from the Deutsche Waffen & Munitionsfabriken A. G. Research Institute, Lübeck. Wiring diagrams are included.

PB 92877

Möller (Herr)

Investigation on the changing degree of yaw for bullets unstable over short distances (first 20 cm of flight of 15 mm A.P.L. Aug 1943. 6p graphs Mi $1.25 Ph $1.25

I. Projectiles—Trajectories—Germany 2. Trajectory determination—Germany 3. Projectiles—Yaw—Germany

Changes are depicted in yaw of 15 mm. armor-piercing shells over a flight of 2 m, 1 m and 70 cm. This is an English translation of a report from the Deutsche Waffen & Munitionsfabriken A.G. Research Institute, Lübeck. Graphs are included.

PB 93331

Norton, H. E.

Development of a mount for mechanical smoke generator M2 for use on 4 x 4—1/4-ton trucks and 1/4-ton trailers. Oct 1944. 33p photos, tables Mi $2.25 Ph $5.00

1. Generators, Smoke—Mounts

PB 93330

Ortynsky, R. L.

Round tail closure for the AN-M69, 6 lb. incendiary bomb. Nov 1944. 22p tables Mi $2.00 Ph $3.75

1. Bombs, Incendiary—Oil 2. Tail design, Bomb

PB 92879

Popoff, M. Kyrille

Yawing movement of projectiles. A new approach. General theory. 1936. 56p tables Mi $2.75 Ph $7.50

1. Projectiles—Yaw—France 2. Trajectory determination—France 3. Projectiles—Trajectories—France

This is an English translation of a report prepared by M. Kyrille Popoff, professor at the University of Sofia. The report is concerned solely with the mathematical problem of the yawing movement. The equation of Mayewski has been accepted with the improvement of M. Burzio in his work. The regularity of these equations has guided the author to a system of linear differential equations of 3rd degree which has been reduced to a system of integral equations of Volterra, the zero positions of which are very simple.

PB 92873

Stühlen (Dr.)

On the most important methods used for calculation and evaluation of trajectories of projectiles and rockets. n.d. 48p tables Mi $2.50 Ph $6.25

1. Ballistics, Rocket—Exterior—Germany 2. Projectiles—Trajectories—Germany 3. Trajectory determination—Germany

This is an English translation of a lecture given by the author on the most important methods in use at Rheinmetall-Borsig A.G. for the computation and evaluation of the trajectories of projectiles and rockets. The mathematical basis of the Runge-Kutta method is discussed. Numerical integrations have been made of the differential equations of the motion of projectiles and rockets, as well as an analysis of fired trajectories. Charts and graphs are included.

PB 92377

Tabor, D.

Lubrication in the drawing of brass shell cases. Jun 1942. 9p graphs Mi $1.25 Ph $1.25

1. Projectiles—Cases—Australia

PB 92379

Tabor, D. and Worner, H. W.

Wear of gun barrels by copper bands. Mar 1942. 6p photos, tables Mi $1.25 Ph $1.25

1. Gun barrels—Wear—Australia

PB 92372

Tabor, D.

Wearing properties of induction hardened gun barrel steel on copper. Jun 1942. 4p Mi $1.25 Ph $1.25

1. Gun barrels—Wear—Australia

PB 91750

U. S. Air Force.

Set: Training, individual, repairman, weapons, small arms. Feb 1948. 4p tables Mi $1.25 Ph $1.25

1. Training equipment—Small arms weapons repairmen 2. T. Small arms weapons repairman's training equipment 3. AAF TO 00-30-1045

PB 91749

U. S. Air Force.

Set: Training, individual, technician, supply, ammunition. Feb 1948. 4p tables Mi $1.25 Ph $1.25

1. Training equipment—Ammunition supply technicians 2. T. Ammunition supply technicians training equipment 3. AAF TO 00-30-1074

PB 42158r

U. S. Army Air Forces.

North American: Installation of K-14 series and N-9 gun sights—P-51D and P-51K. Jun 1947. 1p Mi $1.25 Ph $1.25

1. AAF TO 01-60JE-30-1

PB 43819R2

U.S. Army Air Forces

Parts catalog for remote control turret systems, models 2CFR2183 and 2CFR2184 (including periscopic sight mark 33) for A-26 and A-26B airplanes. (Partial revision of PB 43819) (Tech Order AN 11-70AA-6). Sep 1947. 8p Mi $1.25 Ph $1.25

PB 92884

Wolf, (Dr.) and others.

Cinematographic study of the phenomena of expansion accompanying large scale explosions in Deba, Autumn 1942. Jul 1944. 80p photos, drawings, 1 graphs Mi $3.50 Ph $10.00

1. Expansion—Measurements—Germany 2. Detonation—Effects—Germany 3. Explosions—Pressure—Germany 4. Germany. Reichsanstalt für Film und Bild in Wissenschaft und Unterricht

PB 92881

Wolf (Dr.) and others.

Determination of the speed of projectiles on the R.W. 58. May 1944. 7p photos Mi $1.25 Ph $1.25

I. Trajectory determination—Germany 2. Projectiles—Velocities—Germany 3. Projectiles—Photography—Germany 4. Germany. Reichsanstalt für Film und Bild in Wissenschaft und Unterricht

PB 92882

Wolf (Dr.) and others.

Firing with Fin-stabilized rockets 12, 15 and 21 cm: Fin-stabilized shells 10.5 and 15 cm: Motar bombs with sabot 15 cm. Oct 1944. 47p photos, diagrs, graph Mi $2.50 Ph $6.25

I. Projectiles—Trajectories—Germany 2. Trajectory determination—Germany 3. Gun mounts—Vibration—Germany 4. Ballistics, Rocket—Exterior—Germany 5. Germany. Reichsanstalt für Film und Bild in Wissenschaft und Unterricht

PB 92883

Wolf, (Dr.) and others.

Investigation of the motion of muzzle of PAW 8 cm on firing. Dec 1944. 7p photos, graph Mi $1.25 Ph $1.25

I. Guns—Muzzles—Recoil—Germany 2. Germany. Reichsanstalt für Film und Bild in Wissenschaft und Unterricht

PB 92885

Wolf, (Dr.) and others.

Investigations on the ofen barrel. Jun 1944. 24p photos (5 fold), graphs Mi $2.00 Ph $3.75

I. Projectiles—Velocities—Measurements—Germany 2. Gun barrels—Performance—Germany 3. Ofens barrel (Gun barrel) 4. Germany. Reichsanstalt für Film und Bild in Wissenschaft und Unterricht

PACKING AND PACKAGING

PB 92429

Dixon, C. E.

Report on boxes and wooden equipment at Penfield explosives factory. Progress report no. 23. Jul 1943. 70p photos, drawings, tables Mi $3.00 Ph $8.75

I. Containers, Wood—Australia 2. Australia. Council for Scientific and Industrial Research. Division of Forest Products

The wooden boxes and equipment discussed in this report were examined at an explosives factory in South Australia, in July 1943. These boxes and equipment have been grouped according to the Explosive Factory Sections, in which they are used. Also, some notes on service boxes, general equipment, equilibrium moisture content, have been given under the heading of "General" at the end of the report.

PB 92461

U. S. Air Force and U. S. Navy Dept.

Container: Shipping, interior, reusable, metal. Air Force-Navy aeronautical specification intermediate. Apr 1948. 2p table Mi $1.25 Ph $1.25

I. Containers, Shipping

PB 21586a2

U. S. Air Force and U. S. Navy Dept.

Preservation and packaging: Parts and equipment (general specification for). Air Force-Navy aeronautical specification. Jul 1948. 3p tables Mi $1.25 Ph $1.25

PB 48011r

U. S. Army Air Forces

Preparation of powered ground equipment engines for storage and equipment. (Tech Order 19-1-40, rev.) Apr 1947. 4p Mi $1.25 Ph $1.25

PB 47653r

U. S. Army Air Forces

Preparation of vehicles for storage and shipment. (Tech Order 19-1-80, rev.) Apr 1947. 15p Mi $1.75 Ph $2.50

PB 57100r

U. S. Army Air Forces

Preservation, packaging and packing of antifriction bearings. (Tech Order 00-85A-04-1, rev.) Jun 1947. 23p Mi $2.00 Ph $3.75

PB 82211

U. S. War Dept.

Marking: Exterior, domestic and export shipment, by contractors. Jun 1947. 12p diagr Mi $1.75 Ph $2.50

I. Marking equipment 2. Containers, Shipping—Marking

PB 82211a

U. S. War Dept.

Marking: Exterior, domestic and export shipment, by contractors. Jun 1947. 1p Mi $1.25 Ph $1.25

PB 86002

U. S. War Dept. and U. S. Navy Dept.

Packaging and packing for overseas shipment: Adhesives water-resistant, case-liner. (Joint Army-Navy Specification JAN-P-140). Oct 1946. 6p Mi $1.25 Ph $1.25

PAPER AND ALLIED PRODUCTS

PB 93489

Green, J. B. and others.

German papermaking industry with particular reference to paper mills using rags as raw material

and producing filter papers, blottings and fine papers. Jul 1946. 66p photos Mi $3.00 Ph $8.75
I. Filter paper—Germany 2. Paper making machinery—Germany 3. Paper mills—Germany 4. BIOS FR 1724, Item 22

PHOTOGRAPHIC AND OPTICAL GOODS

PB 90994

Franke & Heidecke, Brunswick, Ger.
Rolliflex automat camera. 1937-1941. 392f drawings (Text in German) Mi $9.00 Enl Pr $52.50 For abstract, see PB 90994S 2p Mi $1.25 Ph $1.25
I. Cameras, Automatic—Germany 2. Cameras—Design—Germany 3. Automat (Camera)

PB 73499s

Germany. Reichsinstitut für Chemotechnik.
Three letters on the testing of cements for optical lenses. 1944. 2p Mi $1.25 Ph $1.25
I. Micro FIAT CC 161, Frames 284-304, abstract

PB 73075s2

Leitz, Ernst, G.m.b.H., Wetzlar, Ger.
Drawings for parts and accessories of optical instruments. 1936-1944. 2p Mi $1.25 Ph $1.25
I. Micro FIAT G 31, Frames 929-1243, abstract

PB 73025s2

Leitz, Ernst, G.m.b.H., Wetzlar, Ger.
Drawings for parts and tools for optical instruments. 1936-1941. 2p Mi $1.25 Ph $1.25
I. Micro FIAT D 21, Frames 4349-4973, abstract

PB 73079s

Leitz, Ernst, G.m.b.H., Wetzlar, Ger.
Drawings and parts lists for an observation telescope and adjusting device. 1942-1945. 1p Mi $1.25 Ph $1.25
I. Micro FIAT G 35, Frames 2412-2763, abstract

PB 73078s2

Leitz, Ernst, G.m.b.H., Wetzlar, Ger.
Drawings and parts lists for precision machines and tools for the production of optical instruments. 1936-1943. 2p Mi $1.25 Ph $1.25
I. Micro FIAT G 34, Frames 2071-2411, abstract

PB 73385s2

Leitz, Ernst, G.m.b.H., Wetzlar, Ger.
Leica cameras. 1935-1944. 2p Mi $1.25 Ph $1.25
I. Micro FIAT CC 241, Frames 1-444, abstract

PB 73023s2

Leitz, Ernst, G.m.b.H., Wetzlar, Ger.
Machine tools for optical instruments: telescopes and accessories. 1937-1944. 2p Mi $1.25 Ph $1.25
I. Micro FIAT D 19, Frames 2818-3587, abstract

PB 73173s2

Leitz, Ernst, G.m.b.H., Wetzlar, Ger.
Production drawings for projectors and episcopes. (Abstract). 1929-1941. 1p Mi $1.25 Ph $1.25
I. Micro FIAT M 6, Frames 1-743, abstract

PB 73018s

Leitz, Ernst, G.m.b.H., Wetzlar, Ger.
Telescopes and telescopic sights. 1944. 2p Mi $1.25 Ph $1.25
I. Micro FIAT D 14, Frames 1-618, abstract

PB 93483

Taylor, E. Wilfred and Philpot, A. J.
Carl Zeiss, Jena—some details of production processes. n.d. 18p Mi $1.75 Ph $2.50
I. Optical industry—Germany 2. CIOS XXXIII-64, Item 9

PB 91785

U. S. Air Force.
Parts catalog: Aerial camera focalscope AAF part No. 45D17886. Mar 1948. 4p drawings, table Mi $1.25 Ph $1.25
I. Cameras, Aerial—Focalscope 2. AAF TO 17-15EA-2

PB 91787

U. S. Air Force and U. S. Navy Dept.
Parts catalog: Cone 40-inch F5.0 for K-series aircraft cameras. Feb 1948. 16p photos, drawings, tables Mi $1.75 Ph $2.50
I. Cameras, Aerial—Parts 2. AN 10-10AC-53

PB 91747

U. S. Air Force.
Set: Photograph, 16th photographic reconnaissance squadron (special). Mar 1948. 4p tables Mi $1.25 Ph $1.25
I. Photography, Aerial—Equipment 2. AAF TO 00-30-384

PB 39926r

U. S. Air Force
Set: Photographic liaison squadron. (Tech Order 00-30-166) Mar 1948. 2p Mi $1.25 Ph $1.25

PB 91748

U. S. Air Force.
Set: Squadron, photographic technical (special). Mar 1948. 15p tables Mi $1.75 Ph $2.50
I. Photography, Aerial—Equipment 2. AAF TO 00-30-633

PB 91929

U. S. Army Air Forces and others.
Handbook of operation, service and overhaul instructions with parts catalog: Aircraft torpedo camera type I (formerly type F-46). Aug 1945. 40p photos, diagrs, tables Mi $2.25 Ph $5.00
I. Aircraft torpedo (Camera) 2. Cameras, Aerial—Parts 3. AN 10-10AG-1

PHYSICS

General

PB 86092

Chemische-Physikalische Versuchsanstalt der Marine, Kiel.

Survey of important detonation tests. Vol. A: Testing devices. (Rept ATS 36, Part I) n.d. 118p MI $4.75 Ph $15.00

The "Chemische-Physikalische Versuchsanstalt" had for a number of years been entrusted with the investigation of all problems concerning explosion physics, detonation techniques and explosion chemistry insofar as they concern the German Navy. This Vol. A covers the most important tests and measuring devices of this Chemico-Physical Test Laboratory. Following a description of devices designed for a variety of tests, such as for example, the time lenses; the devices for measurement of a pressure wave originating in the course of an underwater explosion and the effect of the latter are described and discussed. In conclusion of this first volume are descriptions of the two most important devices in explosion chemistry, namely, the explosive calorimeter and the "Orsart device" for fume analysis. Fifty illustrations are included. A translation from the German.

PB 92149

Moeller, H. G. and Jacobs, M.

Grundsaetzliche untersuchung der zyklotronumkehrung. (Basic investigations of the cyclotron inversion). Jan 1945. 11p drawings MI $1.75 Ph $2.50

1. Cyclotrons—Inversion—Germany 2. Germany. Bevollmächtigte für Hochfrequenzforschung.

PB 92984

Tomonaga, Sin-itiro

On infinite field reactions in quantum field theory. May 1948. 5p MI $1.25 Ph $1.25

1. Quantum theory—Japan 2. Tokyo. Imperial University. Institute of Technology. Division of Physics

PB 93764

Ueber die Schallgeschwindigkeit. (Sound velocity of fluids). Nov 1947. 20p tables, graphs (Text in German) MI $1.75 Ph $2.50

1. Sound—Speed—Germany

Nuclear

PB 93476

Baker, C. P. and Bistline, J. A.

Description of purification and filling technique for BF_3 ionization chambers. Oct 1947. 5p MI $1.25 Ph $1.25 (Limited supply available mimeo $.05) (Also available from U. S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo $.05)

1. Atomic power—Research 2. Ionization chambers 3. Boron fluoride—Purification 4. MDDC 1409

Either boron trifluoride gas as commercially available or boron trifluoride etherate commercially available may be used. In starting with gas, the first step is to form the etherate which is done simply by mixing; the dimethyl or diethyl ether is suitable. The etherate is then mixed with reasonably dry calcium fluoride. Apparently, a calcium fluoborate is formed and the ether is regenerated. The dimethyl comes off as a gas; the diethyl can be evaporated off with gentle heating. The calcium fluoborate can be stored indefinitely if kept dry. Normal open storage is not adequate as the glass container in which it has been kept will show etching indicating decomposition. Before filling an ionization chamber, the calcium fluoborate must be thoroughly outgassed. A glass vacuum system with mercury pump was used and outgassed at 100 degrees C in a vacuum of between 10^{-3} and 10^{-5}. This generally requires about 24 hours. To prepare the system for filling a chamber, the calcium fluoborate complex is sealed to the system, and liquid air placed on the removable trap. The complex is then outgassed at 100 degrees C and the stopcock closed. The trap is removed, cleaned, and replaced and the chamber checked for leaks and pumped down to 10^{-4} or 10^{-5}. To fill the chamber the stopcock to the pumps is closed and a dry ice pack placed over the removable trap. The BF_3 is produced by heating the complex between 280 and 330 degrees C with a small electric furnace. When the desired pressure is reached, the heat is removed and the stopcock closed. To insure a good vacuum, the BF_3 is frozen out in the freeze-out tube with liquid air and the system opened to the pumps until a satisfactory vacuum is reached. The liquid air is removed and the chamber filled and sealed off. A large portion of the remaining BF_3 can then be absorbed back into the cooled CaF_2 and rest frozen out in the freeze-out tube and removed to another system for recombination with ether. The ionization chambers are normally filled to two atmospheres. Most of the negative ions are collected as electrons and the number-bias curve is good. A potential of between 2 and 3 kilovolts is necessary and the insulators must be thoroughly clean and dry, both inside and out. A chamber filled to 20 cm BF_3 and 50 cm argon needs no special precautions on gas purity. No recovery methods for BF_3 was attempted, but it is anticipated that one could recover a large fraction by freezing the BF_3 with liquid air, forming the etherate and then the calcium fluoborate. Drawings of the vacuum system and the ionization chamber used are appended.

PB 93470

Bethe, H. A. and Christy, R. F.

Isotopic masses and abundances. Jul 1943. 5p tables MI $1.25 Ph $1.25 (Limited supply available

mimeo $.05) (Also available from U.S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo $.05)
1. Atomic power—Research 2. Isotopes 3. MDDC 887
A table contains the isotopic mass values which the authors consider most reliable. According to the given "probable errors", the masses up to neon are very much more accurately known than for the heavier elements. The lighter masses were calculated taking into account *all* of the more accurate data from mass spectrograph as well as disintegrations and attempting the best possible fit.

PB 93454

Branch, Garland M.

Neutron temperature measurements in graphite and in a uranium-graphite reactor. Oct 1946. 11p graphs, tables Mi $1.25 Ph $1.25 (Limited supply available mimeo $.10) (Also available from U.S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo $.10)
1. Atomic power—Research 2. Neutrons—Detection 3. Neutrons—Measurements 4. Atomic piles—Heat transfer 5. MDDC 747
The temperature of neutrons at thermal equilibrium in graphite and the Clinton uranium-graphite pile has been measured by observing the transmission of the neutrons through calibrated 1/v absorbers, as detected by 1/v detecting foils sandwiched between an identical pair of the absorbers. On the assumptions that the neutron velocity distribution is approximately Maxwellian and that the neutrons are scattered isotropically in the moderator, the following expression is derived for the relationship between the transmission, A/A_0, and the most probable velocity of the neutrons, α;

$$A/A_0 = 4/\sqrt{\pi} \int_0^\infty x^2 e^{-x^2} E_2 (v_a/x) dx,$$

where $E_2(v_a/\alpha x)$ is an E function tabulated by Placzek in MT-1 and v_a is a measurable absorber constant defined by the relation

$$v_a = - v \ln (I/I_0),$$

I/I_0 being the transmission of a parallel beam of monoenergetic neutrons of velocity v through the absorber.
The neutron temperature in a large block of graphite was measured to be about 80° K above the graphite temperature, in the uranium-graphite reactor about 140° K above the graphite temperature.

PB 93469

Chamberlain, O. and others.

Range measurements of 94^{239} and 94^{238}. Jun 1943. 2p Mi $1.25 Ph $1.25 (Limited supply available mimeo $.05) (Also available from U. S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo $.05)
1. Atomic power—Research 2. Polonium—Alpha rays 3. Plutonium—Alpha rays 4. Alpha rays—Measurements 5. MDDC 489
The ranges of alphas from 94^{239} and 94^{238} have been measured by comparison with Po alphas, and are found to be 3.68 and 4.08 cm of air.

PB 93475

Creutz, E.

Crushing strength of aluminum tubes. Sep 1943. 6p tables, graph Mi $1.25 Ph $1.25 (Limited supply available mimeo $.10) (Also available from U.S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo $.10)
1. Atomic power—Research 2. Tubes, Aluminum—Compression 3. MDDC 1448
Some measurements were made by the Armour Research Foundation on the crushing strength of a series of 2S aluminum tubes, of nearly identical final hardness, specially prepared by the Wolverine Tube Division. The method of measuring the crushing strength consisted of mounting the tubes in a special pressure vessel through the walls of which the ends of the specimen extended so that atmospheric pressure was always inside the tube. The tubes were 6 1/2 inches long, making all but the 1-inch diameter tubes fall into the definition of long tubes. Since the data obtained did not fit already existing equations for steel tubes, the following empirical equation was developed:

$$P = 1.52 \times 10^7 \left(\log 10\frac{D^3}{W^3} - 2.95\right)\frac{W^3}{D^3}$$

where W is the wall thickness and D the tube diameter, both in inches. The observed collapsing pressure P and that calculated from the formula agree for tubes from 0.2 to 1 inch in diameter with wall thicknesses from 2% to 8% of the diameter with a root mean square error of less than 6%. The formula breaks down for wall thickness exceeding 9% of the diameter. Tests were also made on the crushing strengths of 2S aluminum tubes of different lengths to which the pressure was applied along a linear element by means of a steel round of approximately tube diameter. Inspection of the data shows that an equation of the form $F = \frac{KW^2}{D}$ is followed well within the accuracy of the results. F is the force per linear inch. K for the crushing strength is 4.7×10^4 pounds per square inch. A table is given listing diameter of the tube, its wall thickness, length, load sufficient to reach the elastic limit, and ultimate load sustained. There is some indication of a decrease in strength with an increase in length. The observed values fit the empirical equation with a r.m.s. error of less than 10%.

PB 93664

Dainton, F. S.

The effect of high energy radiations on pure water and aqueous solutions. Sep 1946. 22p Mi $2.00 Ph $3.75

1. Atomic power—Research—Canada 2. Radiation, High frequency—Canada 3. Radiochemistry—Canada 4. NRCC 1615

The possible effects of high energy radiations on liquid and gaseous systems are discussed with particular reference to water and aqueous systems. In the latter case, it is concluded that the neutral atoms and radicals, i.e. H. and OH, formed as a result of the primary ionisation, have more far reaching chemical consequences than the charged particles formed in the primary act of ionisation. Reactions into which H. and HO. may enter with themselves and with solute molecules such as stable anions, oxidising and reducing anions and cations, molecular oxygen, vinyl compounds, etc, are considered in detail.

PB 93472

Davidson, W. L. and Gelb, G.

Effects of pile bombardment on uncured elastomers. Nov 1947. 14p tables Mi $1.75 Ph $2.50 (Limited supply available mimeo $.10) (Also available from U. S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo $.10)

1. Atomic power—Research 2. Radiation—Effects 3. MDDC 1449

In the past, several workers have studied the effects of ionizing radiations on hydrocarbons. Through analysis of the products formed they have established that four competitive processes are usually operative. They include: (1) Dehydrogenation, (2) Condensation or polymerization, (3) Hydrogenation (Action of nascent hydrogen on any unsaturated matter present) (4) Decomposition (C-C cleavage). The chain reacting nuclear pile offers an ideal means for subjecting relatively thick samples of matter (such as rubber) to uniformly high concentrations of radiation. If process (2) should predominate in pile irradiation of rubber, it is possible that a new method of vulcanization would be available. If process (1) proved to be controlling it would be a means of introducing unsaturation into materials such as polyisobutylene, polyvinyl chloride, acrylates, etc., thus making them vulcanizable. Though of lesser interest, if reaction (4) turned out to be most important, it could conceivably uncover an improved method for reclaiming rubber. The conclusions reached are as follows: (1) Uncured natural rubber undergoes polymerisation and/or cross-linking when exposed to pile radiations (γ-rays, neutrons), (2) polyisobutylene samples are appreciably degraded by pile radiation, (3) The same effects as found in (1) and (2) are greatly enhanced by secondary alpha particles, produced by an (n,) reaction on boron (milled into the elastomers). However, even a 2 hour bombardment of natural rubber does not give a "cure" that even remotely compares with sulfur vulcanization, (4) The unsaturation present in natural rubber is slightly reduced by pile radiations and alpha particles, (5) Pile bombardment does not introduce unsaturation into polyisobutylene, (6) A typical butyl stock is permanently degraded by pile irradiation. Such a sample, on being cured, shows greatly reduced tensile strength compared to that of a control sample, and (7) Natural rubber shows a weak but measurable radioactivity days after bombardment probably due to its mineral content. Polyisobutylene is not appreciably active.

PB 93662

George, K. D.

A note on the self-weakening of Beta-rays from active copper. Nov 1946. 11p graphs Mi $1.75 Ph $2.50

1. Beta rays—Counts—Canada 2. Atomic power—Research—Canada 3. NRCC 1614

PB 93445

Heaney, Robert J. and Rodden, Clement J.

Determination of U_3O_8 in Canadian ores by means of the "ten per cent" reductor. May 1946. 4p tables Mi $1.25 Ph $1.25 (Limited supply available mimeo $.05) (Also available from U. S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo $.05)

1. Atomic power—Research 2. Uranium—Analysis 3. Uranium—Properties 4. MDDC 901

The efficiency of the ten per cent reductor in overcoming the interference of nickel in the determination of U_3O_8 volumetrically is verified with a group of synthetic mixtures. The deleterious effect of copper in ore samples is noted, and the various effects of the presence of copper are investigated. The satisfactory determination of uranium in nickel bearing ores, provided that copper and reducible elements other than uranium are removed, is shown.

PB 93451

Helmholz, A. C. and others.

Angular distribution of neutrons from targets bombarded by 190 Mev deuterons. Jun 1947. 7p drawing, graphs, tables Mi $1.25 Ph $1.25 (Limited supply available mimeo $.10) (Also available from U. S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo $.10)

1. Atomic power—Research 2. Neutrons—Sources 3. Cyclotrons 4. MDDC 1081

It was found that 190 Mev deuterons striking a thin target produce a beam of neutrons concentrated about the forward direction of the deuterons. The angular distribution of intensity in this beam was studied, using as target materials Be, Al, Cu, Mo, Sn, Ta, Pb, and U. The shape of the distributions is represented approximately by the function $(1+a\theta^2)^{-3/2}$, and the measured widths in radians between points of half intensity can be given approximately as $0.155+0.00080\ Z$, where Z is the atomic number of the target material. It is pointed out that these data fit within a few per cent a simple theory of neutron production, according to which the proton is "stripped" from the deuteron by striking a target nucleus, leaving the neutron free. This document is an abstract.

PB 93455

Hyde, Earl K.

Preparation of aluminum borohydride and lithium borohydride by metathesis reactions. Jun 1946. 11p tables, graph Mi $1.25 Ph $1.25 (Limited supply available mimeo $.50)

1. Atomic power—Research 2. Aluminum borohydrides 3. Lithium borohydrides 4. MDDC 1335

A satisfactory method of preparation was found in the metathesis between aluminum halides and alkali metal borohydrides as represented by the equation:

$$AlX_3 + 3MBH_4 \rightarrow Al(BH_4)_3 + 3MX.$$

X represents chlorine or bromine and M represents sodium or lithium. Reactions of this type produce in high yield a product free from volatile contaminants other than small amounts of diborane and small amounts of solid material, which are easily separated from the aluminum borohydride. There are no troublesome side reactions and the operations and equipment are comparatively simple. The reaction of aluminum chloride and lithium borohydride was studied first. If the two solid materials are sealed off in an evacuated glass tube very little reaction occurs, but if the tube is continuously evacuated, the reaction proceeds smoothly at room temperature. To obtain a satisfactory yield it is, however, necessary to raise the temperature when the reaction begins to slow down. The reaction of aluminum chloride and sodium borohydride is considerably more sluggish at room temperature than the reaction just described. When aluminum chloride and sodium borohydride are mixed in a glass tube and subjected to continuous evacuation, aluminum borohydride forms at only a very slow rate. By heating the mixture to a temperature of 60-80° C a yield of aluminum borohydride of about 30 to 40 percent is obtained in 2 or 3 hours. If the temperature is raised to the neighborhood of 100° C, the total yield reaches nearly 60 percent. Somewhere in this temperature range the reaction mixture cakes into hard, crusted lumps and the reaction virtually ceases. At somewhat higher temperatures the mixture melts and the reaction proceeds satisfactorily. Detailed procedures for the reactions, preparation of reagents, tabulated and plotted data and hazards involved are included.

PB 93458

Katcoff, S. and Miskel, J. A.

Ranges in air of plutonium fission fragments as a function of their mass. Oct 1946. 3p Mi $1.25 Ph $1.25 (Limited supply available mimeo $.05) (Also available from U. S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo $.05)

1. Atomic power—Research 2. Radio—chemistry 3. Plutonium 4. Fission products—Analysis 5. MDDC 812

It is possible to effect a partial separation of fission products by taking advantage of the variation in the range of fission fragments as a function of their mass. The same phenomenon can be used to determine the mass numbers of previously unassigned fission products. In the experiments reported the ranges in air of seven plutonium fission products have been determined and mass numbers have been assigned to two of these. The straggling in the range has been determined for each of these also.

PB 93459

Livingston, Ralph

Ionization chamber for alpha-ray measurements. Jun 1945. 5p diagr, graphs Mi $1.25 Ph $1.25 (Limited supply available mimeo $.05) (Also available from U. S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo $.05)

1. Atomic power—Research 2. Alpha rays—Detection 3. Alpha rays—Measurements 4. Argon—Properties 5. Polonium—Analysis 6. Ionization chambers 7. MDDC 1517

The study of polonium-alpha induced chemical reactions has necessitated a device for counting alphas from several millicuries of polonium mounted on foils. The Segré type of ionization current chamber has the disadvantage of a non-linear calibration curve with a somewhat involved calibration procedure. A modified Segré type ionization chamber allows the assay of millicurie amounts of polonium supported on foils. An argon atmosphere facilitates attainment of saturation. Calibration of the chamber gave values of 26.1 ev for the energy required for formation of an ion pair in argon, 1.35 for the relative ionizing power of argon, and 35.2 ev for the energy to form an ion pair in air, all of which agree well with published values.

PB 93452

Myers, H. R. and DeLong, W. B.

Fluorine corrosion: (A) High-temperature attack on metals by fluorine and hydrogen fluoride; and (B) Behavior of insulated steel parts in fluorine cells. Nov 1947. 19p graphs, diagrs, tables Mi $1.75 Ph $2.50 (Limited supply available mimeo $.10) (Also available from U. S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo $.10)

1. Atomic power—Research 2. Fluorine—Corrosion 3. MDDC 1465

Corrosion tests at elevated temperature showed that nickel and Monel have good resistance to fluorine up to 500° C. Silicon in plain carbon steel has a marked effect on its corrosion in fluorine; steel containing 0.22% Si is unsuitable at 200° C., while that containing 0.007% Si is useful up to 350° C. The stainless steels, with the exception of type 347, show little attack up to 250° C., Aluminum up to 450° C. and magnesium up to 300° C., copper, nickel, and the nickel-base alloys show reasonably good resistance to HF up to 600° C. The addition of steam to HF is practically without effect on the corrosion of nickel and Monel at 600° C. The anodic corrosion of steel in KHF_2 HF at 90° C. increases rapidly with potential drops above approximately 5v.

PB 93460

Overman, Ralph T.

Radioactivities produced in neutron irradiation of chlorine. Apr 1947. 4p Mi $1.25 Ph $1.25 (Limited supply available mimeo $.05) (Also available from U. S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo $.05)

1. Atomic power—Research 2. Radioactivity, Induced 3. Neutrons—Cross sections 4. MDDC 857

C.P. potassium chloride was placed in the Clinton pile and bombarded for long periods (12 to 18 months). The experiments are described. The results are summarized in the table below. The confirmed values are in parentheses.

Reaction	Half-life	Beta Energy (al. Abs.) Mev
Cl (n,γ)Cl	1 x 10⁶ years	0.66
Cl (n,γ)Cl	(37 minutes)	complex
Cl (n,p)S	(87 days)	0.17
Cl (n,γ)P	(14.7 days)	(1.7)

PB 93666

Placzek, G.

The neutron density near a plane surface. Feb 1947. 9p tables, graphs Mi $1.25 Ph $1.25

1. Atomic power—Research—Canada 2. Neutrons—Density—Canada 3. NRCC 1637

The solution of Milne's integral equation for the density is obtained by an iteration method. As a check, the angular distribution of the emerging neutrons, derived from this solution, is compared with the exact angular distribution given in NT-6 and is shown to agree at all points to within one per mille.

PB 93473

Rothenberger, C. D. and others.

Colorimetric determination of uranium with l-ascorbic acid. Sep 1947. 1p Mi $1.25 Ph $1.25 (Limited supply available mimeo $.05) (Also available from U. S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo $.05)

1. Atomic power—Research 2. Uranium—Colorimetric analysis 3. MDDC 1314

A stable, yellow-brown color is produced by addition of l-ascorbic acid to weakly acid solutions of hexavalent uranium. In 50 ml of solution containing 0.5 to 15 mg of uranium buffered at pH=4.0 with acetate ion the color intensity, measured with 10 mm cells on the Beckman spectrophotometer set at 410 millimicrons, is a linear function of uranium concentration. The method may be applied directly to suitable solutions containing 25 to 1500 mg uranium per liter. The reagent blank is reproducible and small but not negligible. Chloride, nitrate, and perchlorate ions are without effect on the color. Phosphate, sulfate, fluoride, and the anions of dibasic organic acids interfere. Compounds of chromium, vanadium, nickel, zinc, molybdenum, and aluminum interfere, while those of iron, cadmium, magnesium, calcium, tin, manganese, and thorium are without appreciable effect on the color. Addition of pyridine with the buffer solutions prevents interference of cupric ion. Diethyl ether extraction of uranium from aqueous acid solutions containing calcium nitrate provides a very rapid and effective purification of uranium for this colorimetric method. The combined purification and colorimetric method may be applied within sixty to seventy minutes to contaminated uranium solutions to yield results accurate to ± 2%.

PB 93482

Rothrock, George Moore

Preparation of certain organic chloro and fluoro compounds. Feb 1945. 47p tables, graph Mi $2.50 Ph $6.25 (Limited supply available mimeo $.20) (Also available from U. S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo $.20)

1. Atomic power—Research 2. Chlorine compounds—Organic—Preparation 3. Fluorine compounds—Organic—Preparation 4. MDDC 1178

Part I of thesis on the preparation of the bis (trifluoromethyl benzenes. The best yield of bis (trifluoromethyl) benzene was obtained when pure 1,4-bis (trichloromethyl) benzene was used. m-Xylene gave lower yields, and tar formation occurred when o-xylene was fluorinated at the same temperature as used for m- and p-xylene. It is therefore desirable to use xylene from which o-xylene has been removed; the mixture of m- and p-xylene is relatively cheap. Agitation was necessary if good yields were to be obtained. If no catalyst was used, the optimum temperature for fluorination of bis (trichloromethyl) benzene with hydrogen fluoride was 150° C. If either antimony trifluoride or antimony pentachloride was used as a catalyst, the optimum temperature was 100° C. In the absence of a catalyst, the minimum reaction time was about three hours. Since antimony trifluoride and antimony pentachloride catalysts reduce the optimum temperature for the reaction, it is probable that these catalysts will also shorten the time required for completion of the reaction.

PB 92446

Schumar, James F.

Uranium, thorium, and beryllium melting and fabrication. Mar 1948. 9p photos Mi $1.25 Ph $1.25 (Limited supply available mimeo $.10) (Also available from U. S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo $.10)

1. Atomic power—Research 2. Uranium—Casting 3. Thorium—Casting 4. Beryllium—Casting 5. AECD 1851

The difficulties encountered in casting these metals are listed, and the precautions taken against them discussed. Some of the mechanical properties of U, Th, and Be are given, and the methods of fabrication of each of the metals are outlined in some detail. Because of their reactivity with oxygen both beryllium and uranium are cast in a vacuum or under protection of inert gases. Beryllium has been successfully cast in dry and purified argon or helium atmospheres. On the other hand, uranium, which reacts with even small amounts of oxygen (that are difficult to remove from inert gases), is cast in a vacuum. Seven photographs are included.

PB 93489

Sullivan, W. H. and others.

Rhodium radioisotopes induced in deuteron-bombarded ruthenium. May 1947. 2p Mi $1.25

Ph $1.25 (Limited supply available mimeo $.05) (Also available from U. S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo $.05)

I. Atomic power—Research 2. Rhodium—Isotopes 3. Ruthenium 4. Radioactivity, Artificial 5. MDDC918

During a series of experimental investigations to determine what radioactivity was induced in deuteron-bombarded Ru, it was observed that four radioisotopes, with half-life values of 21 hours ~86 hours, 59 days, and ~200 days could be identified chemically as Rh. Methods of procedure are given which led to the identification of Rh^{100}, Rh^{105}, Rh^{101} Rh^{102}.

PB 93665

Sutton, J.

Ionic species in uranyl solutions. Mar 1947. 11p diagrs Mi $1.75 Ph $2.50

I. Uranyl perchlorate—Absorption spectra—Canada 2. Atomic power—Research—Canada 3. NRCC 1612

From measurements of the absorption spectra and p_Hs of solutions of uranyl perchlorate, two species, UO_3 UO_2^{++} and $(UO_3)_2UO_2^{++}$, have been shown to exist in solutions above p_H 2.0 and the equilibrium constants for their formation have been determined.

PB 93448

Swank, R. K. and Palevsky, H.

Study of variations accompanying low current ionization chamber measurements. Jun 1945. 17p tables, graph Mi $1.75 Ph $2.50 (Limited supply available mimeo $.10) (Also available from U. S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo $.10

I. Atomic power—Research 2. Ionization chambers 3. Geiger counters 4. Electrometers 5. Mesotrons 6. MDDC 1524

It was observed that when an ionization chamber was attached to a vibrating reed electrometer, a small current, which had variations of much greater magnitude than could be attributed to the measuring instrument, was indicated. Variations were also noticed with a Beckman D.C. Amplifier. Measurements made with a Lindemann Electrometer showed about the same magnitude of background currents, but the variations visually observed were about five times smaller than those recorded by the Vibrating Reed Electrometer. A test chamber was constructed, and tests performed to determine the nature of the background current and variations. The background variations are due to the nature of the source producing the background current. A rough calculation seems to indicate that the background observed with the chamber shielded by three inches of lead may be produced by mesotrons. The smaller variations shown by the Lindemann Electrometer, as compared to the vibrating reed instrument, may be accounted for by the difference in the period of the two instruments. Contribution of alpha contamination and the effects of differences in pressure in the chamber were also investigated.

PB 93477

U. S. Atomic Energy Commission. Hanford Engineer Works.

Nuclear physics primer, chap. I. Nov 1947. 19p tables, graphs, drawings Mi $1.75 Ph $2.50 (Limited supply available mimeo $.15) (Also available from U. S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo $.15)

I. Atomic power—Research 2. Nuclear physics 3. Nuclear theory 4. MDDC 1497

This chapter introduces the beginner to the fundamentals of nuclear physics.

Table of Contents:

Building blocks of matter (structure of the atom, structure of the nucleus—isotopes, atomic and nuclear forces)

Nuclear reactions (artificial transmutation, mass and energy relationships)

Types of nuclear reactions (methods of reactions, absorption of neutrons)

Radioactivity (unstable nuclei, radioactive decay, growth of activity)

Nuclear fission (liquid drop model, fission fragments, energy release)

Detection of nuclear radiations (ionization and particle range, detection)

Nuclear physics literature (general, radioactivity)

PB 93466

U. S. Atomic Energy Commission. Los Alamos Scientific Laboratory.

Remarks on university affiliations and laboratory facilities. Oct 1947. 10p Mi $1.25 Ph $1.25 (Limited supply available mimeo $.10) (Also available from U. S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo $.10)

I. Atomic power—Instruments 2. Atomic power—Research 3. MDDC 1479

A general paper describing the research facilities for graduate students.

PB 93667

Wallace, P. R. and LeCaine, J.

Elementary approximations in the theory of neutron diffusion. Aug 1946. 212p graphs Mi $7.75 Ph $27.50

I. Atomic power—Research—Canada 2. Neutrons—Diffusion—Canada 3. NRCC 1480

This report presents in systematic form the solutions of problems of neutron diffusion in a single medium both with and without multiplication, on the basis of elementary theory. The stationary state diffusion equation with capture is assumed for the diffusion of thermal neutrons, and the diffusion equation of the time-dependent type, without capture, for the diffusion of non-thermal neutrons. The stationary neutron densities are derived for various shapes of the medium and various source distributions. The problems are treated in the following sequence: determination of the density distribution of (i) thermal neutrons due to sources of

thermal neutrons (ii) non-thermal neutrons due to sources of fast neutrons, (iii) thermal neutrons due to sources of fast neutrons, without and with multiplication. The problem of multiplying systems under critical conditions in the absence of primary sources is treated in a final section.

The material is arranged according to: (a) type of problem (b) shape of medium (c) distribution of sources. Graphs are given to illustrate some of the more important distributions.

PB 93447

Weinberg, A. M.

Diffusion of thermal neutrons. Feb 1947. 6p Mi $1.25 Ph $1.25 (Limited supply available mimeo $.10) (Also available from U. S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo $.10)

1. Atomic power—Research 2. Neutrons—Scattering 3. Neutrons—Diffusion 4. Neutrons, Thermal—Diffusion 5. MDDC 1150

Formulas for the diffusion of thermal neutrons are calculated for the following two cases:

I. The neutron energy is unaffected by scattering collisions with the medium. This corresponds to diffusion in a medium of infinite atomic weight; it is a fairly good approximation for thermal neutrons diffusing in U.

II. The neutron suffers complete "amnesia" after each collision, that is, its energy after collision is uncorrelated with its energy before a collision, and it is thrown into a Maxwellian energy distribution, regardless of its initial energy. This is more nearly correct for collisions with light nuclei than with heavy ones, but is of course not strictly correct for either.

PB 93464

Williams, W. D.

Report on a magnetic drive design for the Fercleve Corporation. Nov 1946. 54p tables, photos, graphs, diagrs (9 fold) Mi $2.75 Ph $7.50 (Limited supply available mimeo $1.90) (Also available from U. S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo $1.90)

1. Atomic power—Research 2. Drives, Magnetic 3. Clutches, Magnetic 4. MDDC 548

Designs were required for a permanent magnet drive to couple a motor shaft with a pump impeller through a thick diaphragm of small diameter. The report presents the procedure and results of the magnetic drive development up to date of cancellation of contract and includes the general features of the design which would have been recommended if the contract had not been cancelled. Tests showed that such a drive transmitted a maximum torque to 0.82 foot-pound at the required speed of 40 revolutions per minute (1/160 horsepower) through an airgap 1/2 inch long containing a cylindrical diaphragm of phosphor bronze 3/8 inch thick and 4 inches in diameter. The following specifications to be met by the desired magnetic drive design were established.

1. Alnico V (G.E. Designation B3C8) to be used to supply the magnetomotive force.

2. Maximum torque 8.8 inch-pounds (0.74 foot-pound)

3. Speed of rotation 40 rpm.

4. To withstand a peak pressure of 4000 pounds per square inch, a cylindrical diaphragm of phosphor bronze with inside diameter of 4 inches and wall thickness 3/8 inch must be used. (Later, when magnetic tests showed it allowable, Eastern Engineering Company increased the required thickness to 1/2 inch).

5. Operating temperature 125 degrees C.

6. The driven rotor inside the diaphragm is to be made of soft steel and is to be heavily nickel plated.

Two working models were built and tested. A list of detail sketch numbers and titles is included.

PB 93467

Zachariasen, W. H.

Crystal chemistry of fluorides of thorium, uranium, neptunium and plutonium. Jun 1947. 8p tables Mi $1.25 Ph $1.25 (Limited supply available mimeo $.10) (Also available from U. S. Atomic Energy Commission, Oak Ridge, Tenn. Mimeo $.10)

1. Atomic power—Research 2. Radiochemistry 3. Neptunium fluorides—Crystall structure 4. Plutonium fluorides—Crystal structure 5. Thorium fluorides—Crystal structure 6. Uranium fluorides—Crystal structure 7. Fluorine compounds 8. MDDC 1151 This document consists of a set of notes for oral presentation. Information on the studies of more than fifty fluorides of thorium, uranium, neptunium and plutonium is contained, tabulated as follows: Table I gives a list of the fluorides which were examined. As shown in Table 2, some of these compounds have crystal structures of previously known types. A number of new structure types have, however, shown up. Because of the small scattering power of fluorine, complete structure determinations could be carried out only for some of the compounds. However, the positions of the heavy metal atoms have been found for all of the compounds listed in Table I. Table 3 shows the lattice dimensions of fluorides having previously known structure types. The lattice dimensions of the tetrafluorides illustrate the striking decrease in the size of the ion with increasing atomic number due to the filling of the 5f shell. The corresponding contraction in the trivalent state is demonstrated by the lattice dimensions of the trifluorides. Of considerable interest are the double fluorides of thorium and uranium with barium lead, strontium or calcium. In the structure there is complete intermixture of tetravalent and divalent cations so that these double fluorides become in effect pseudo-trifluorides. Similarly, pseudo-difluorides with the fluorite type of structure

were encountered in PuOF and in the alpha-forms of K_2ThF_6, K_2UF_6, and Na_2UF_6. Table 4 gives complete crystal structure data for uranyl fluoride and for the two forms of uranium pentafluoride. Uranyl fluoride is of layer structure type. The uranyl groups have their axes normal to the layers while the fluorine atoms are slightly below and above the uranium planes. All the various preparations of uranyl fluoride which the writer has examined show stacking disorder of the layers. This stacking disorder varies considerably in degree from one sample to the next depending upon the heat treatment of the samples. In the alpha-UF_5 structure there are strings of UF_6-octahedra parallel to the four-fold symmetry axis with only van der Waals forces holding the strings together. In the beta-UF_5 form on the other hand, each uranium is linked to seven fluorine atoms so that a three-dimensional network of UF_7-polyhedra is obtained. As a consequence the beta-form has more than 10% higher density than the alpha-form. Table 5 gives the crystal structure data for U_2F_9, $NaTh_2F_9$, and Na_3UF_7. The first two compounds are cubic and isomorphous in spite of the lack of correspondence in their formulas. The heavy metal atoms are structurally equivalent. In U_2F_9 there is resonance between the plus four state and the plus five or plus six states. The sodium atoms in $NaTh_2F_9$ are located in positions corresponding to holes in the U_2F_9 structure. The analogous uranium compound NaU_2F_9, does not exist. The tetragonal Na_3UF_7 structure is closely related to that of fluorite. The unit cell corresponds to two fluorite cells placed on top of each other. There is segregation between sodium and uranium atoms and furthermore one in every eight fluorine atoms is removed at random to balance the valences. As far as the other compounds go only partial structure determinations are as yet available. Table 6 gives a list of the lattice dimensions for the various compounds. Most of these compounds are phases observed in the systems KF-UF_4, KF-ThF_4, and NaF-UF_4 which the writer has studied in detail. Because of the many phases which occur in these systems it was difficult to prepare single-phase samples, and the identification of the various phases accordingly could not be carried out by the orthodox methods of analytical chemistry. The chemical identity was therefore determined in the following unusual way. First the dimensions of the unit cell were deduced. Next with the aid of the observed diffraction intensities the number and positions of the uranium atoms in the unit cell were determined. Tables 8 and 9 illustrate how this information, together with a knowledge of the space requirements of potassium and fluorine atoms, permits the determination of the chemical formula. The various unusual compounds referred to in the tables were prepared by different investigators as listed in Table 10.

PHYSIOLOGY

PB 92423

Australia. Council for Scientific and Industrial Research. National Standards Laboratory. Physics Section.

Report on working conditions in naval corvette radar rooms. Nov 1944. 6p tables, graphs Mi $1.25 Ph $1.25

1. Working conditions—Tests—Australia

This report covers some of the physical conditions affecting the efficiency of radar operators in H.M.A. Corvettes in tropical waters, including thermal environment, visual conditions and psychological factors.

PB 92427

Mathieson, C. J. and others.

Report on the illumination of radar operations rooms and the fatigue of radar operators. Jun 1944. 19p drawings, tables Mi $1.75 Ph $2.50

1. Fatigue—Tests—Australia 2. Lighting—Tests—Australia 3. Australia. Council for Scientific and Industrial Research. National Standards Laboratory, Physics Section

This report describes tests carried out in an attempt to measure visual fatigue of radar operators under various conditions of illumination. It includes recommendations for the lighting of fixed radar operations rooms.

PRINTING, PUBLISHING AND ALLIED INDUSTRIES

PB 90742

Siemens & Halske A. G., Berlin

Servicing of teleprinters. 1938-1940. 26f photos, diagrs (Text in German) Mi $2.00 Enl Pr $5.00

For abstract see PB 90742s 1p Mi $1.25 Ph $1.25

1. Teletypewriters—Maintenance and repair—Germany

PSYCHOLOGY

PB 88483

Koehler, O.

Vom erlernen unbenannter anzahlen bei tauben. (Ability of pigeons to "count"). Oct 1939. 14p (Text in German) Mi $1.75 Ph $2.50

1. Pigeons—Germany 2. Psychology, Comparative—Germany

PB 88489

Koehler, O.

Wellensittiche erlernen unbenannte anzahlen. (Parrots learn to count). Nov 1939. 14p (Text in German) Mi $1.75 Ph $2.50

1. Parrots—Germany 2. Psychology, Comparative—Germany

PB 90747

Continental Gummiwerke A. G., Hanover, Ger.
German standards and specifications for rubber conveyor belts and their fabric insertion, and for armoured petrol hose. 1943-1944. 16f tables, drawing (Text in German) Mi $1.75 Enl Pr $3.75
See also BIOS FR 349, Item 22 (PB 23858)
For abstract see PB 90747s 1p Mi $1.25 Ph $1.25
1. Belts, Conveyor—Germany

PB 90751

Continental Gummiwerke A. G., Hanover, Ger.
Rubber machinery; technical drawings. 1936-1945. 164f drawings only Mi $6.25 Enl Pr $22.50
Legends in German or English
See also BIOS FR 349, Item 22 (PB 23858)
For abstract see PB90751S 3p Mi $1.25 Ph $1.25
1. Machinery—Design—Germany 2. Rubber goods—Manufacture—Germany

PB 93484

Cooper, A. and others.
Cellular rubber and plastics. Mar 1947. 138p photos, diagrs, graphs, drawings Mi $5.50 Ph $17.50
1. Desmodurs (Trade name) 2. Moltopren (Trade name) 3. Rubber, Sponge—Germany 4. BIOS FR 1729, Item 22

PB 90750

Harburger Gummiwarenfabrik, Phoenix A. G., Harburg, Ger.
Production of rubber goods; technical drawings. 1931-1945. 14f drawings only Mi $1.75 Enl Pr $3.75
Legends in German or English
See also BIOS FR 349, Item 22 (PB 23858)
For abstract see PB90750S 1p Mi $1.25 Ph $1.25
1. Rubber goods—Manufacture—Germany 2. Machines, Powdering—Design—Germany 3. Micro BIOS FD 1657/46, Frames 1-7

PB 25633s6

Hrubesch, A.
Die abtrennung und aufarbeitung der von den rohbutandiollösungen abgetrennten mono-ole. Jul 1940. 48p drawings, graphs (2fold), table (Text in German) Mi $2.50 Ph $6.25
Supplement 6 to PB 25633
1. Butynediol—Production—Germany 2. I. G. Farbenindustrie A. G., Ludwigshafen, Ger.

PB 91354

I. G. Farbenindustrie A. G.
Buna production and distribution. 1937-1945. 1332f diagrs, tables, graphs Mi $9.00 Enl Pr $173.75
For abstract see PB 91354S 8p Mi $1.25 Ph $1.25
1. Rubber, Buna—Production statistics—Germany 2. Hydrogen peroxide—Distillation—Germany

PB 25633s3

I.G. Farbenindustrie A. G., Ludwigshafen, Ger
Die geschichte der Duetschen Buna-fabrikation. (History of synthetic rubber fabrication in Germany). Jun 1945 18p tables (Text in German) Mi $1.75 Ph $2.50
Supplement 3 to PB 25633
1. Rubber, Synthetic—Fabrication—Germany

PB 90755

I. G. Farbenindustrie A. G., Kautschuk-Zentral-laboratorium.
Heat-sensitization and reclaiming of buna, perbunan, etc. 1945. 19f tables Mi $1.75 Enl Pr $3.75
See also BIOS FR 349, Item 22 (PB 23858)
For abstract see PB 90755S 2p Mi $1.25 Ph $1.25
1. Rubber, Buna—Fabrikation—Germany

PB 90753

I. G. Farbenindustrie A. G., Leverkusen, Ger.
Photographs and diagrams of rubber testing equipment. 1941-1945. 14f diagrs, photos Mi $1.75 Enl Pr $3.75
See also BIOS FR 349, Item 22 (PB 23858)
For abstract see PB 90753S 2p Mi $1.25 Ph 1.25
1. Rubber—Testing equipment—Germany

PB 4687s

I. G. Farbenindustrie A. G.
The production of Buna: individual articles on synthetic rubber, 1942-1945. Nov 1945. 2p Mi $1.25 Ph $1.25
1. Micro FIAT R 10, abstract

PB 44939s

Krzikalla and others.
Über die verwertung der destillationsrückstände des butadiens nach der Reppe-synthese. (Developing uses for the distillation residues from butadiene obtained by the Reppe synthesis). Sep 1944. 8p tables (Text in German) Mi $1.25 Ph $1.25
Supplement 1 to PB 44939
For English translation see PB 44839
1. I. G. Farben-industrie A. G., Ludwigshafen, Ger.

PB 50459s

Moeller (Dr.)
Siliceous supports and coke as catalyst support for the production of butadiene from 1.4—butol. Apr 1940. 3p table Mi $1.25 Ph $1.25
(Will not reproduce well)

PB 60574s

Niemann (Dr.)
Butadien aus Butylenglykoldiacetaten. Apr 1940. 8p Mi $1.25 Ph $1.25
1. Rubber, Synthetic—Production—Germany
2. Rubber, Buna—Production—Germany
3. Butadiene—Synthesis—Germany
4. I. G. Farbenindustrie A. G., Ludwigshafen, Ger.

PB 58616s

Trieschmann (Dr.) and Schultze (Dr.)

Versuche zur direktin Herstellung von butadien aus der etwa 30 bis 35% igen wassrigen Lösung von 1.4- Butylenglykol (Rohlösung). May 1939. 10p drawings, tables (Text in German) Mi $1.25 Ph $1.25

Supplement 1 to PB 58616

1. Butadiene—Production—Germany 2. 1,4-Butanediol—Germany

PB 91784

U. S. Air Force.

Tires and tubes: Identification and disposition of over-age and retreaded aircraft casings. Mar 1948. 1p Mi $1.25 Ph $1.25

1. Tires, Aircraft 2. AAF TO 04-10-10

PB 90744

Weber & Schultz, Hamburg, Ger.

Plant arrangement for P.V.C. sheet production (synthetic rubber). Oct 1945. 2f diagr only Mi $1.25 Enl Pr $2.50

Referred to on p. 85 of BIOS FR 349, Item 22 (PB 23858)

For abstract see PB 90744s 1p Mi $1.25 Ph $1.25

1. Rubber, Synthetic—Germany 2. Weber & Schultz, Hamburg, Ger—Plant layout 3. BIOS FR 349, Item 22 LD

STRUCTURAL ENGINEERING, INCLUDING BUILDING MATERIALS

PB 73635s

Lenz & Co., Munich, Ger.

Das stahlbetondach (system Seibert). (Reinforced concrete roof (Seibert system)). 1945. 2p Mi $1.25 Ph $1.25

1. Micro FIAT CC 246, Frames 1-15, abstract

TEXTILES AND TEXTILE PRODUCTS

PB 93486

Barratt, H. and others.

Interrogation of Dr. Hampel on his design for a suspended centrifugal collector for rayon spinning. Aug 1947. 16p Mi $1.75 Ph $2.50

1. Hampel, H. 2. Spinning machines—Germany 3. BIOS FR 1733, Item 31

PB 93638

Samuels, H.

German progress in products and processes for cellulosic textiles. May 1948. 136p drawings, tables Mi $5.50 Ph $17.50

1. Textiles—Processing—Germany 2. I. G. Farbenindustrie A. G., Leverkusen, Ger. 3. I. G. Farbenindustrie A. G., Höchst, Ger. 4. I. G. Farbenindustrie A. G., Ludwigshafen, Ger. 5. BIOS FR 1773, Item 22

PB 92979

U. S. Air Force and U. S. Navy Dept.

Mildew proofing of fabrics, threads and cordages: Copper processes for. Air Force-Navy aeronautical specification. Apr 1948. 8p Mi $1.25 Ph $1.25

1. Mildew proofing 2. 8-Quinolinol-copper complexes 3. Copper-8-quinolinolate

PB 21725r

U. S. Air Force and U. S. Navy Dept.

Thread: Cotton, high tenacity. Air Force-Navy aeronautical specification. May 1948. 7p tables Mi $1.25 Ph $1.25

PB 21727a

U. S. Air Force and U. S. Navy Dept.

Thread: Nylon. Air Force-Navy aeronautical specification. Jul 1948. 2p table Mi $1.25 Ph $1.25

TRANSPORTATION EQUIPMENT

Aeronautics

Aircraft

PB 92426

Australia. Council for Scientific and Industrial Research. National Standards Laboratory. Physics Section.

Progress Report on red lighting of aircraft. Apr 1943. 4p fold drawing Mi $1.25 Ph $1.25

1. Lights, Instrument—Australia

This report describes a method involving the use of red light projectors and an orange lacquer on the glass cover of instruments, by which a Catalina flying boat was converted from self-luminous instrument lighting to red floodlighting.

PB 92346

Gent, B. L.

Investigation of Moriya's formula for the velocity distribution on an arbitrary aerofoil. Jul 1944. 23p diagrs, graphs, tables Mi $2.00 Ph $3.75

1. Airfoils—Pressure distribution—Australia

PB 65641t

Kochanowsky (Herr)

Ergebnisse der aerodynamischen berechnung und der ermittlung. (Results of the aerodynamic and blade loading computation of the rotor of the cierva autogiro C 30A). May 1948. 9p graphs Mi $1.25 Ph $1.25

Translation of PB 65641

1. Cierva C 30A (Autogiro) 2. Autogiros—Rotors—Germany 3. Rotor blades—Design—Germany

PB 93258

Peskin, James C. and Bjornsted, Jeanne M.
Effect of different wavelengths of light on visual sensitivity. Jun 1948. 16p graphs, tables Mi $1.75 Ph $2.50
I. Bjornsted, Jeanne M. 2. Cockpits—Lighting

PB 93259

Shaw, Robert S.
Test firing of the T-7 catapult for downward seat ejection. May 1948. 15p graphs, tables Mi $1.75 Ph $2.50
I. T-7 (Ejection catapult) 2. T-114 (Cartridge) 3. Seats, Airplane—Ejector 4. Cartridges 5. Aircraft catapults

PB 93273

Sissingh, G. von
Zusammenfassender bericht ueber die an dem BHN-Geraet durchgefuehrten untersuchungen. (Stress analysis of a helicopter rotor). Jun 1948. 26p graphs, tables Mi $2.00 Ph $3.75
I. Helicopters—Rotors—Germany

PB 92397

Tabor, D.
Use of brake materials in the landing wheels of Beaufort bombers. Aug 1943. 5p Mi $1.25 Ph $1.25
I. Brakes—Linings—Tests—Australia 2. Landing gear—Brakes—Australia

PB 26340r2

U. S. Aeronautical Board
Relay—10 AMP 3 PDT. (Air Force-Navy Aeronautical Standard Drawing AN 3316). Feb 1948. 1p Mi $1.25 Ph $1.25

PB 88256r

U. S. Air Force and U. S. Navy Dept.
Circuit breakers: Single pole non trip free. Air Force-Navy aeronautical bulletin. Apr 1948. 2p Mi $1.25 Ph $1.25
I. Circuit breakers

PB 91755

U. S. Air Force.
Consolidated: Replacement of fuselage fuel tank—L-13A and L-13B. Mar 1948. 2p photo, table Mi $1.25 Ph $1.25
I. Tanks, Fuel—Aircraft 2. AAF TO 01-5DA-11

PB 91762

U. S. Air Force.
Douglas: Operation of flight control locks—C 54 series. Mar 1948. 1p Mi $1.25 Ph $1.25
I. C-54 (Airplane) 2. Airplanes—Controls 3. AAF TO 01-40NM-190

PB 91771

U. S. Air Force.
Douglas: Sealing of hydraulic compartment access door—C-54 series. Mar 1948. Mi $1.25 Ph $1.25
I. C-54 (Airplane) 2. Airplanes—Hydraulic compartment—Sealing 3. Fire prevention—Aircraft 4. AAF TO 01-40NM-189

PB 91769

U. S. Air Force.
Fairchild: Installation of additional soundproofing attachment—C-82A. Mar 1948. 2p drawings, tables Mi $1.25 Ph $1.25
I. C-82A (Airplane) 2. Ailerons—Controls 3. Soundproofing 4. Airplanes—Soundproofing 5. AAF TO 01-115CBA-46

PB 91768

U. S. Air Force.
General: Restriction of P-80B and P-84 aircraft to VFR. Mar 1948. 2p Mi $1.25 Ph $1.25
I. P-80B 2. P-84 3. Gyros—Modifications 4. J-1 (Attitude gyro) 5. Airplanes—Flight restrictions 6. AAF TO 01-1-318

PB 91783

U. S. Air Force and U. S. Navy Dept.
Handbook: Operation, service, and overhaul instructions with parts catalog—aircraft heaters models 906A, A1, A2, B, B1, D, and F. Oct 1947. 49p photos, drawings, tables Mi $2.50 Ph $6.25
I. U. S. Navy Dept. 2. Airplanes—Heaters 3. AN 03-70A-7

PB 47289r5

U. S. Air Force
Handbook, erection and maintenance instructions, USAF models AT-7, AT-7C; Navy models SNB-2, SNB-3 aircraft. (Tech Order AN90KA-2, rev). Dec 1947. 7p Mi $1.25 Ph $1.25

PB 45116r

U. S. Air Force
Handbook, operation, service and overhaul instructions with parts catalog: Aircraft magnetos, DF18L(R)N, DF18LN-1 and DF18LN-2. (Scintilla). (Supersedes issue of Aug 1945). (Tech Order AN03-5DA-28). Feb 1948. 63p Mi $3.00 Ph $8.75

PB 86072a2

U. S. Air Force and U. S. Navy Dept.
Insignia: National aircraft. Air Force-Navy aeronautical specification. Jun 1948. 3p drawings Mi $1.25 Ph $1.25

PB 21450r

U. S. Air Force and U. S. Navy Dept.
Insulators: Vibration. Air Force-Navy aeronautical specification. May 1948. 9p tables Mi $1.25 Ph $1.25

PB 26183r4

U. S. Air Force and U. S. Navy Dept.
Light assembly: Wing position recessed. Air Force-Navy aeronautical standard. Apr 1948. 1p drawings, tables Mi $1.25 Ph $1.25

PB 86881

U. S. Air Force and U. S. Navy Dept.
Light assembly-tail position. Air Force-Navy aeronautical standard. Mar 1948. 1p drawings, table Mi $1.25 Ph $1.25
1. Airplanes—Light

PB 91760

U. S. Air Force.
Lockheed: Revision of trim tab relay wiring—P-80A-10-Lo and P-80B. Mar 1948. 1p Mi $1.25 Ph $1.25
1. P-80A-10-LO (Airplane) 2. P-80B (Airplane) 3. Relays, Trim tab—Adjustment 4. AAF TO 01-75FJ-35

PB 93655

U. S. Air Force and U. S. Navy Dept.
Marking, labeling, and tagging: Aircraft aeronautical equipment, accessories, parts, materials, and supplies. Jul 1948. 7p tables Mi $1.25 Ph $1.25
1. Aeronautical equipment—Labeling

PB 91766

U. S. Air Force.
North American: Installation of tail wheel declutching head—AT-6 series. Mar 1948. 12p photo (1 fold), drawings (1 fold), tables Mi $1.75 Ph $2.50
1. AT-6 (Airplane) 2. Tail wheels—Locks 3. AAF TO 01-60F-59

PB 91761

U. S. Air Force.
North American: Reinforcement of spinner assembly rear section bulkhead-P-51D and F-6D. Mar 1948. 2p table Mi $1.25 Ph $1.25
1. P-51D (Airplane) 2. F-6D (Airplane) 3. Spinners 4. AAF TO 01-60-131

PB 88258r

U. S. Air Force and U. S. Navy Dept.
Switches: Low travel limit. Air Force-Navy aeronautical bulletin. Mar 1948. 2p table Mi $1.00 Ph $1.00

PB 21821a2

U. S. Air Force and U. S. Navy Dept.
Wiring: Installation of aircraft. Air Force-Navy aeronautical specification. Apr 1948. 14p diagrs, drawings, tables Mi $1.75 Ph $2.50

PB 47785r2

U. S. Army Air Forces.
Basic weight check list and loading data for army models A-26B and A-26C airplanes. May 1947. 6p tables Mi $1.25 Ph $1.25
1. AAF TO 01-40AJ-5

PB 46907r5

U. S. Army Air Forces.
Erection and maintenance instructions for army model AT-11 and navy model SNB-1 airplanes. Jun 1947. 4p Mi $1.25 Ph $1.25
1. AAF TO 01-90KC-2

PB 41224r

U. S. Army Air Forces.
Erection and maintenance instructions for Army model PT-13D and Navy model N2S-5 airplanes. Apr 1947. 9p photos, tables Mi $1.25 Ph $1.25
1. PT-13D (Airplane) 2. N2S-5 (Airplane) 3. Airplanes—Maintenance and repair 4. Airplanes, Trainer 5. AAF TO 01-70AC-2

PB 47389r6

U. S. Army Air Forces.
Erection and maintenance instructions for army models AT-7, AT-7C and navy models SNB-2,-SNB-3 airplanes. Jul 1947. 3p drawings, tables Mi $1.25 Ph $1.25
1. AAF TO 01-90KA-2-6

PB 41725r2

U. S. Army Air Force.
Erection and maintenance instructions for Army models C-46, C-46A, C-46D, C-46F and Navy model R5C-1 airplanes, Jul 1947. 15p photos, tables Mi $1.75 Ph $2.50
1. Airplanes, Transport—Erection 2. Airplanes, Transport—Maintenance and repair 3. C-46 (Airplane) 4. C-46A (Airplane) 5. C-46D (Airplane) 6. C-46F (Airplane) 7. R5C-1 (Airplane) 8. AAF TO 01-25LA-2

PB 41846r5

U. S. Army Air Forces.
Erection and maintenance instructions for model P-61C airplanes. Jun 1947. 4p photos, drawings, tables Mi $1.25 Ph $1.25
1. P-61C (Airplane) 2. Airplanes, Fighter—Maintenance and repair 3. Airplanes, Fighter—Erection 4. AAF TO-15FC-2

PB 41908r3

U. S. Army Air Forces.
Erection and maintenance instructions for models P-61A and P-61B airplanes. Jul 1947. 3p tables Mi $1.25 Ph $1.25
1. P-61A (Airplane) 2. P-61B (Airplane) 3. Airplanes, Fighter—Maintenance and repair 4. Airplanes, Fighter—Erection 5. AAF TO 01-15FB-2

PB 41733r3

U. S. Army Air Forces.
Erection and maintenance instructions for models P-80A and FP-80A airplanes. Mar 1947. 12p photos, tables Mi $1.75 Ph $2.50
1. P-80A (Airplane) 2. FP-80A (Airplane) 3. Airplanes, Fighter—Maintenance and repair 4. Airplanes, Fighter—Erection 5. AAF TO 01-75FJA-2

PB 42221r3

U. S. Army Air Forces.
Erection and maintenance instructions for models RP-63A-11, RP-63A-12, RP-63C-2, RP-63G-1 airplanes. May 1947. 2p drawings, table Mi $1.25 Ph $1.25
1. Airplanes—Maintenance and repair 2. RP-63A-11 (Airplane) 3. RP-63A-12 (Airplane) 4. RP-63C-2 (Airplane) 5. RP-63G-1 (Airplane) 6. Airplanes, Fighter—Maintenance and repair 7. Airplanes, Fighter—Erection 8. AAF TO 01-110FP-2A

PB 42165r5

U. S. Army Air Forces.
Erection and maintenance instructions for P-51H-1, -5,-10 airplane. May 1947. 12p photos, drawings, tables Mi $1.75 Ph $2.50
1. P-51H-1 (Airplane) 2. P-51H-5 (Airplane) 3. P-51H-10 (Airplane) 4. Airplanes—Maintenance and repair 5. Airplanes, Fighter—Erection 6. AAF TO 01-60JF-2

PB 46569r

U. S. Army Air Forces.
General: Operation of float and ski-equipped aircraft. Aug 1947. 7p diagrs Mi $1.25 Ph $1.25
1. Aircraft, Amphibious 2. AAF TO 01-1-11

PB 80440s

U. S. Army Air Forces.
List of applicable publications C-45F aircraft and equipment. Jul 1947. 7p tables Mi $1.25 Ph $1.25
1. AAF TO 01-90CD-01A

PB 42155r

U. S. Army Air Forces.
North American: Replacement of bomb rack sway braces—P-51D. Jun 1947. 2p photo Mi $1.25 Ph $1.25
1. Racks, Bomb 2. P-51D (Airplane) 3. AAF TO 01-60JE-22

PB 47748r

U. S. Army Air Forces.
Parts catalog for airplanes army models A-26B, A-26C, A-26D and A-26E. May 1947. 24p drawings, tables Mi $2.00 Ph $3.75
1. AAF TO 01-40AJ-4-1

PB 41225r

U. S. Army Air Forces.
Parts catalog for army model PT-13D and navy model N2S-5 airplane. May 1947. 10p photos, tables Mi $1.25 Ph $1.25
1. PT-13D (Airplane) 2. N2S-5 (Airplane) 3. Airplanes—Parts 4. AAF TO 01-70AC-4

PB 46809r

U. S. Army Air Forces.
Parts catalog for AT-11 airplanes. Jun 1947. 6p tables Mi $1.25 Ph $1.25
1. AAF TO 01-80XC-4-1

PB 40726r2

U. S. Army Air Forces.
Parts catalog for model B-29A airplanes. Jun 1947. 3p photos, tables Mi $1.25 Ph $1.25
1. B-29A (Airplanes) 2. Airplanes, Bomber—Parts 3. AAF TO 01-20EJA-4

PB 41734r3

U. S. Army Air Forces.
Parts catalog for P-80A and FP-80A airplanes. Jun 1947. 4p photos, drawings, tables Mi $1.25 Ph $1.25
1. P-80A (Airplane) 2. FP-80A (Airplane) 3. Airplanes, Fighter—Parts 4. AAF TO 01-75FJA-4

PB 93361

U. S. National Advisory Committee for Aeronautics.
List of NACA reports reprinted as wartime reports. Advance confidential reports. Jun 1948. 35p Mi $2.25 Ph $5.00
1. Aeronautics—Bibliography 2. Aeronautical research—Bibliography

PB 93360

U. S. National Advisory Committee for Aeronautics.
List of NACA wartime reports (Langley, Cleveland, Ames, Outside reports). Jun 1948. 38p Mi $2.25 Ph $5.00
1. Aeronautics—Bibliography 2. Aeronautical research—Bibliography

PB 92350

Willis, J. B.
Wind tunnel tests on a high speed, high chamber aerofoil. 1945. 10p diagr, graphs Mi $1.25 Ph $1.25
1. Airfoils—Wind tunnel tests—Australia

Instruments

PB 92880

Benzinger, Theodor
Instruments and controls as tools of the mind and muscles. n.d. 8p drawings Mi $1.25 Ph $1.25

1. Airplanes—Landing—Germany 2. Landing approach—Germany 3. Landing aids—Germany 4. Instruments, Aeronautical—Germany 5. Lander (Flight instrument)

PB 92108

Ledbetter, Henry F.

Comparison test of dial design for airspeed indicators. Apr 1948. 18p photos Mi $1.75 Ph $2.50

1. Air speed indicators—Calibration 2. Air speed indicators—Dials 3. Instruments, Aeronautical

PB 87395r2

U. S. Aeronautical Board.

Valves: Hydraulic check. Army-Navy aeronautical bulletin. Apr 1948. 2p tables Mi $1.25 Ph $1.25

PB 93324

U. S. Air Force and U. S. Navy Dept.

Bulb: Temperature, cylinder head, electrical-resistance, bayonet lock type, -50 To + 300 degrees centigrade. U. S. Air Force-Navy aeronautical standard. Jul 1948. 1p drawings Mi $1.25 Ph $1.25

1. Bulbs, Resistance—Specifications

PB 92457

U. S. Air Force and U. S. Navy Dept.

Computer: Dead reckoning. Air Force-Navy aeronautical standard. Mar 1948. 1p drawing Mi $1.25 Ph $1.25

1. Computers, Dead reckoning—Design

PB 91759

U. S. Air Force.

Fairchild: Modification of control assembly AN/ARA-10 and interphone control box C-166/AIC-3-C-82A. Mar 1948. 11p Mi $1.75 Ph $2.50

1. C-82A (Aircraft) 2. AN/ARA-10 (Interphone control assembly) 3. C-179/ARA-10 (Radio control panel) 4. C-166/AIC-3 (Interphone control box) 5. Interphones—Modifications 6. AAF TO 00-115CBA-24

PB 26391r3

U. S. Air Force and U. S. Navy Dept.

Fitting: Engine cylinder head temperature measuring element. Air Force-Navy aeronautical standard. Mar 1948. 1p drawings, table Mi $1.25 Ph $1.25

PB 42616r

U. S. Air Force

Handbook, operation and service instructions: Electric tachometers. (General Electric). (Tech Order AN)5-5-4). Dec 1947. 12p Mi $1.75 Ph $2.50

PB 44343r4

U. S. Air Force

Handbook, operation, service and overhaul instructions: Indicators and transmitters, Autosyn indicating systems. (Eclipse-Pioneer). (Tech Order AN 05-55B-1, rev.) Dec 1947. 58p Mi $2.75 Ph $7.50

PB 26527r3

U. S. Air Force and U. S. Navy Dept.

Indicator: Electric turn and bank. Air Force-Navy aeronautical standard. Apr 1948. 1p drawings, tables Mi $1.00 Ph $1.00

PB 93603

U. S. Air Force and U. S. Navy Dept.

Indicator—Tachometer, electric, single, 0-110 percent RPM. Air Force-Navy aeronautical standard. Jul 1948. 1p drawing Mi $1.25 Ph $1.25

1. Indicators, Tachometer

PB 93312

U. S. Air Force and U. S. Navy Dept.

Indicators: Electrical resistance type thermometer. Air Force-Navy aeronautical bulletin. Jun 1948. 1p table Mi $1.25 Ph $1.25

1. Thermometers, Resistance—Specifications

PB 21439a3

U. S. Air Force and U. S. Navy Dept.

Indicators: Rate of climb. Air Force-Navy aeronautical specification. Jun 1948. 2p table Mi $1.25 Ph $1.25

PB 93526

U. S. Air Force and U. S. Navy Dept.

Indicators: Tachometer, electric, single, 0-110 percent RPM. Air Force-Navy aeronautical specification. Jul 1948. 19p diagrs, tables Mi $1.75 Ph $2.50

1. Indicators, Tachometer 2. Tachometers, Electric

PB 93601r3

U. S. Air Force and U. S. Navy Dept.

Numerals and letters—Aircraft instrument dial, standard form of. Air Force-Navy aeronautical design standard. Jul 1948. 1p drawing Mi $1.25 Ph $1.25

1. Instruments, Indicating—Numerals and letters

PB 93604

U. S. Air Force and U. S. Navy Dept.

Thermocouple parallel arrangement-chromel and alumel, installation of. Air Force-Navy aeronautical design standard. Jul 1948. 1p drawing Mi $1.25 Ph $1.25

1. Thermocouples—Standards

PB 92980

U. S. Air Force and U. S. Navy Dept.

Tube: Extension, for AN 5763 drift meter. Air Force-Navy aeronautical specification. May 1948. 7p Mi $1.25 Ph $1.25

1. Driftmeters—Parts 2. Tubes, Aluminum alloy

PB 93852

U. S. Air Force and U. S. Navy Dept.

Tube: Pitot, electrically heated, L shaped, inverted. Air Force-Navy aeronautical standard. Jul 1948. 1p drawings Mi $1.25 Ph $1.25

1. Pitot tubes—Design

PB 26603r2

U. S. Air Force and U. S. Navy Dept.

Valve: In line type 6 GPM hydraulic directional control. Air Force-Navy aeronautical standard. Jul 1948. 1p drawings Mi $1.25 Ph $1.25

PB 26604r2

U. S. Air Force and U. S. Navy Dept.

Valve: Radial type 3-1/2 GPM. Hydraulic directional control. Air Force-Navy aeronautical standard. Jul 1948. 1p drawings Mi $1.25 Ph $1.25

PB 26605r2

U. S. Air Force and U. S. Navy Dept.

Valve: Radial type 6 GPM hydraulic directional control. Air Force-Navy aeronautical standard. Jul 1948. 1p drawings Mi $1.25 Ph $1.25

PB 26606r2

U. S. Air Force and U. S. Navy Dept.

Valve: Radial type 16 GPM hydraulic directional control. Air Force-Navy aeronautical standard. Jul 1948. 1p drawings Mi $1.25 Ph $1.25

PB 87396r

U. S. Air Force and U. S. Navy Dept.

Valves: Hydraulic shuttle. Air Force-Navy aeronautical bulletin. May 1948. 1p tables Mi $1.25 Ph $1.25

PB 26316r3

U. S. Air Force and U. S. Navy Dept.

Voltmeter: Direct current, panel. Air Force-Navy aeronautical standard. Jul 1948. 1p drawings, table Mi $1.25 Ph $1.25

PB 21810r

U. S. Air Force and U. S. Navy Dept.

Weight and balance control data (for airplanes and rotorcraft). Air Force-Navy aeronautical specification. May 1948. 45p drawings, tables Mi $2.50 Ph $6.25

PB 42660s

U. S. Army Air Forces

Inspection, maintenance, storage and shipment of instruments and instrument maintenance parts. (Tech Order 05-1-1A) Apr 1947. 2p Mi $1.25 Ph $1.25

PB 21480a

U. S. Air Force and U. S. Navy Dept.

Lamp assembly: 24-inch rigid drum type rotating beacon. Air Force-Navy aeronautical specification. Apr 1948. 3p tables Mi $1.25 Ph $1.25

1. Airplanes—Lights 2. Beacons—Rotating

PB 91794

U. S. Air Force.

Parts catalog: Vertical gyro control, type K-2. Feb 1948. 22p photos, tables Mi $2.00 Ph $3.75

1. K-2 (Vertical gyro control) 2. Gyro controls—Parts 3. AAF TO 05-45AM-17

PB 93311

U. S. Air Force and U. S. Navy Dept.

Resistor: Thermocouple lead spool. Air Force-Navy aeronautical bulletin. Jun 1948. 1p table Mi $1.25 Ph $1.25

1. Resistors, Thermocouple—Specifications

Engines and Propellers

PB 92348

Australia. Council for Scientific and Industrial Research. Division of Aeronautics.

Fuel consumption trials on Fairey Battle. 1942. 6p graph, tables Mi $1.25 Ph $1.25

1. Engines, Aircraft—Fuel consumption—Tests—Australia

PB 93710

Bayerische Motoren Werke, A. G.

Firing order, torsion oscillation exciter, mass balance (manuscript of calculations 803 B). n.d. 9f drawing (Text in German) Mi $1.25 Enl Pr $2.50

1. BMW 803 (Engine) 2. Engines, Aircraft—Germany

PB 92414

Bowden, F. P. and Worner, H. W.

Manufacture of aircraft bearings. Mar 1942. 14p photos Mi $1.75 Ph $2.50

1. Bearings, Aircraft—Australia 2. Metals, Bearings—Australia

PB 92406

Bowden, P. and others.

Wear of wasp cylinder barrels. Aug 1941. 18p photos, tables Mi $1.75 Ph $2.50

1. Liners, Cylinders—Australia 2. Piston rings—Wear—Australia

PB 92361

Bowden, Philip and Worner, H. W.

Manufacture of bearings. Technique for bonding silver to steel in the silver lead bearing. Oct 1940. 6p photo, drawing Mi $1.25 Ph $1.25

1. Bearings—Manufacture—Australia 2. Metals, Bearing—Silver alloys—Australia

PB 92353

Bowden, Philip and Worner, H. W.

Manufacture of bearings, the bonding of the silver to the steel, the examination of an American bearing. Oct 1940. 7p photos Mi $1.25 Ph $1.25

1. Metals, Bearing—Silver alloys—Australia

PB 92345

Bowden, Philip

Micro and X-ray examination of bearings. Jul 1940. 15p photos Mi $1.75 Ph $2.50
1. Bearings—X-ray inspection—Australia

PB 92355

Bowden, Philip

Micro and X-ray examination of bearings. Silver lead bearings. Bonding of silver to the steel shell. Aug 1940. 5p photos Mi $1.25 Ph $1.25
1. Bearings—X-ray inspection—Australia 2. Metals, Bearing—Silver alloys—Australia

PB 92354

Bowden, Philip and Worner, H. W.

Silver lead bearings. The bonding of the silver to the steel. Sep 1940. 6p photos Mi $1.25 Ph $1.25
1. Metals, Bearing—Silver alloys—Australia

PB 92428

Greenhill, W. L. and Kemp, N. R.

Temperatures and moisture contents in wooden aircraft wings in service. Progress report no. 2. Apr 1945. 11p photos, drawing, graphs, tables Mi $1.75 Ph $2.50
1. Wings, Wood—Surface treatment—Australia 2. Australia, Council for Scientific and Industrial Research. Division of Forest Products

Tests have been made to determine the effect of various surface finishes on the temperatures reached in cells constructed to represent portion of a wooden aircraft wing. The results have shown that finishes such as aluminum paint with high infra-red reflectance are very effective in reducing these temperatures. Proprietary paints with special infra-red reflecting ingredients have been found to be somewhat better than the standard paint of the same colour. However, the improvement was not very great. The suggestion is made that further consideration might, with advantage, be given to the question of the finishes used for wooden aircraft.

PB 92399

Honeycombe, R. W. K.

Effect of phosphorus and nickel on the bond between a copper-lead bearing alloy and a mild steel backing. Jun 1943. 12p photos, diagrs, tables Mi $1.75 Ph $2.50
1. Bearings, Aircraft—Australia 2. Bearings, Copper-lead—Australia 3. Copper-lead alloys—Australia 4. Metals, Bearing—Australia

PB 92384

Honeycombe, R. W. K.

Manufacture of Allison main bearing. Jan 1943. 7p photos Mi $1.25 Ph $1.25
1. Bearings—Manufacture—Australia

PB 92412

Honeycombe, R. W. K.

Manufacture of copper lead flanged bearings of the Merlin inner big end type. Sep 1942. 9p photos, table Mi $1.25 Ph $1.25
1. Bearings, Aircraft—Australia 2. Bearings, Copper-lead—Australia 3. Metals, Bearing—Australia

PB 92388

Hughan, R. R. and Moore, A. J. W.

Manufacture by electrodeposition of silver-lead bearings with a brass backing. May 1945. 10p Mi $1.25 Ph $1.25
1. Metals, Bearing—Silver-lead-indium—Australia 2. Bearings—Manufacture—Australia 3. Electroplating—Australia 4. Bearings—Electro-plating—Australia

PB 92349

Keeble, T. S.

Air consumption of a Merlin 66 and the metering characteristics of its Stromberg carburetor as measured on a propeller test-stand. 1945. 18p photos, graphs, tables Mi $1.75 Ph $2.50
1. Carburetors, Aircraft—Tests—Australia 2. Engines, Aircraft—Tests—Australia

PB 92396

Krok, T. V.

Life tests on Australian and Hoffman T2B ball races. Aug 1943. 7p photo, diagrs, tables Mi $1.25 Ph $1.25
1. Ball bearings—Tests—Australia

PB 92851

Moore, A. J. W.

Examination of silver lead indium hercules master rod bearing after severe test. Oct 1944. 4p photos Mi $1.25 Ph $1.25
1. Bearings—Tests—Australia

PB 92413

Moore, A. J. W. and Tabor, D.

Examination of the cylinder and piston rings from a Japanese fighter plane. Mar 1942. 11p photos, graph, tables Mi $1.75 Ph $2.50
1. Piston rings—Wear—Australia 2. Cylinders—Wear—Australia

PB 92386

Moore, A. J. W.

Lead and indium plating of bearings. Sep 1943. 8p photos Mi $1.25 Ph $1.25
1. Bearings, Silver-lead—Australia 2. Plating, Lead—Australia 3. Plating, Indium—Australia

PB 92383

Moore, A. J. W.

Manufacture of silver bearings by electrodeposition. Jan 1943. 5p photos Mi $1.25 Ph $1.25
1. Bearings—Manufacture—Australia

PB 92400

Moore, A. J. M.
Production of a silver plated Hercules bearing. Jun 1943. 17p photos, diagr, fold drawing, graph, tables Mi $1.75 Ph $2.50
I. Bearings, Aircraft—Australia 2. Bearings, Silver plated—Australia 3. Metals, Bearing—Silver—Australia

PB 92386

Moore, A. J. M.
Small scale plant for the electrodeposition of silver bearings. Apr 1945. 7p photos Mi $1.25 Ph $1.25
I. Bearings, Aircraft—Australia 2. Bearings, Silver-lead—Australia 3. Bearings—Electroplating—Australia 4. Electroplating—Equipment—Australia 5. Metals, Bearing—Silver—Australia

PB 92370

Moore, A. J. M. and Tabor, D.
Wear of wasp cylinder barrels. Comparison of a good and a bad cylinder. Dec 1941. 5p graph Mi $1.25 Ph $1.25
I. Engines, Aircraft—Wear—Australia

PB 92030

Neff, John M.
Ceramic coatings for aircraft power systems. Apr 1948. 12p tables Mi $1.75 Ph $2.50
I. Engines, Aircraft—Coatings 2. Coatings, Ceramic 3. Oxides, Refractory—Thermal properties 4. Coatings, Oxide

PB 92778

Peabody, P. E.
Daimler-Benz diesel engines. Nov 1945. 17p tables Mi $1.75 Ph $2.50
I. Engines, Diesel—Aircraft—Germany 2. Engines, Diesel—Supercharged—Germany 3. Daimler-Benz A.G., Mannheim, Ger.

PB 92369

Tabor, D.
Cylinder and piston wear in aero engines. Effect of chromium plating the chrome molybdenum. Jan 1942. 5p photos, table Mi $1.25 Ph $1.25
I. Engines, Aircraft—Wear—Australia

PB 91763

U. S. Air Force.
Aeronca: Elimination of foreign material from fuel system—L-16A and L-16B. Mar 1948. 2p Mi $1.25 Ph $1.25
I. L-16A (Airplane) 2. L-16B (Airplane) 3. Engines, Aircraft—Fuel systems 4. AAF TO 01-145LAA-11

PB 23832r

U. S. Air Force and U. S. Navy Dept.
Bearings: Anti-friction airframe ball. Air Force-Navy aeronautical specification. Jun 1948. 11p drawings, tables Mi $1.75 Ph $2.50

PB 91754

U. S. Air Force.
Boeing: Replacement of exhaust system—B-50A. Mar 1948. 2p table Mi $1.25 Ph $1.25
I. B-50A (Airplane) 2. Exhaust manifolds 3. AAF TO 01-20ELA-12

PB 93314

U. S. Air Force and U. S. Navy Dept.
Bolts: Aeronautical standard drawings for. Air Force-Navy aeronautical bulletin. Jun 1948. 2p tables Mi $1.25 Ph $1.25
I. Bolts

PB 88256r2

U. S. Air Force and U. S. Navy Dept.
Circuit breakers: Single pole non trip free. Air Force-Navy aeronautical bulletin. Jun 1948. 2p tables Mi $1.25 Ph $1.25

PB 26450r6

U. S. Air Force and U. S. Navy Dept.
Cone: Propeller hub front. Air Force-Navy aeronautical standard. Apr 1948. 1p drawings, tables Mi $1.25 Ph $1.25

PB 26390r4

U. S. Air Force and U. S. Navy Dept.
Envelope-engine protective (for R-3350 engine). Air Force-Navy aeronautical standard. Mar 1948. 1p drawings Mi $1.25 Ph $1.25

PB 26383r2

U. S. Air Force and U. S. Navy Dept.
Envelope engine protective (for V-770 engine). Air Force-Navy aeronautical standard. Apr 1948. 1p drawings Mi $1.25 Ph $1.25

PB 91764

U. S. Air Force.
Fairchild: Modification of oil filler neck scuppers and replacement of heater duct covers—C-82A. Mar 1948. 3p drawings, tables Mi $1.25 Ph $1.25
I. C-82A (Airplane) 2. Covers, Heater duct 3. Engines, Aircraft—Lubrication systems 4. AAF TO 01-115CBA-52

PB 26463r

U. S. Air Force and U. S. Navy Dept.
Flange: Fixed pitch wood propeller and test club hub. Air Force-Navy aeronautical standard. Jul 1948. 2p drawings, tables Mi $1.25 Ph $1.25

PB 91780

U. S. Air Force.
Fuel systems: Modification of stromberg NA-Y9E1 model carburetor. Mar 1948. 4p drawings Mi $1.25 Ph $1.25
I. NA-Y9E1 (Carburetor) 2. Carburetors, Aircraft 3. AAF TO 03-108B-4

PB 26626r

U. S. Aeronautical Board.
Gasket: Hydraulic replaceable reservoir type filter element. Army-Navy aeronautical standard. Mar 1948. 1p drawing, table Mi $1.25 Ph $1.25

PB 93304

U. S. Air Force and U. S. Navy Dept.
Gasket: Propeller governor mounting pad. Air Force-Navy aeronautical specification. Jun 1948. 7p tables Mi $1.25 Ph $1.25
1. Gaskets—Specifications

PB 91775

U. S. Air Force.
General: Equipment comprising complete reciprocating type aircraft engines. Mar 1948. 3p tables Mi $1.25 Ph $1.25
1. Engines, Reciprocating—Equipment 2. Engines, Aircraft 3. AAF TO 02A-1-14

PB 91765

U. S. Air Force.
General: Replacement of Ford type R-1 generators—A-26 series, FA-26 series, B-24 series, B-50 series, C-74, C-97, C-99, C-119 series, F-13 series, F-15 series, P-61 series, and P-83. Mar 1948. 1p tables Mi $1.25 Ph $1.25
1. Generators, Aircraft 2. R-1 (Generator) 3. AAF TO 01-1-315

PB 91774

U. S. Air Force.
General electric: Installation of wire mesh filters in fuel nozzle assemblies—J-35 series. Mar 1948. 1p Mi $1.25 Ph $1.25
1. J-35 (Aircraft engine) 2. Nozzles, Fuel 3. AAF TO 02B-105C-13

PB 93305

U. S. Air Force and U. S. Navy Dept.
Generator: Tachometer, four pole. Air Force-Navy aeronautical specification. Jun 1948. 13p tables Mi $1.75 Ph $2.50
1. Generators, Tachometer—Specifications

PB 26180r4

U. S. Air Force and U. S. Navy Dept.
Guard: Toggle switch, two position. Air Force-Navy aeronautical standard. Jun 1948. 1p drawings, table Mi $1.25 Ph $1.25

PB 91781

U. S. Air Force and U. S. Navy Dept.
Handbook, overhaul instruction: Carburetors, float type—NA series. Feb 1948. 46p drawings, (8 fold), graph, tables Mi $2.50 Ph $6.25
1. Carburetors, Aircraft—Maintenance and repair 2. AN 03-10BB-1

PB 91782

U. S. Air Force and U. S. Navy Dept.
Handbook, overhaul instructions- Automatic propeller synchronizers. Feb 1948. 70p photos, drawings, (7 fold), tables Mi $3.00 Ph $8.75
1. Synchronizers—Maintenance and repair 2. AN 03-20BC-3

PB 91773r

U. S. Air Force and U. S. Navy Dept.
Handbook, service instructions, models V-1710-143 and -145 aircraft engines. Mar 1948. 7p photos, diagr, drawing, tables Mi $1.25 Ph $1.25
1. V-1710-143 (Aircraft engine) 2. V-1710-145 (Aircraft engine) 3. Engines, Aircraft—Maintenance and repair 4. AN 02A-5AH-2-1

PB 91746

U. S. Air Force.
Interchangeability charts listing standard and substitute parts by group: Aircraft hardware stop nuts. Feb 1948. 333p photos, tables Mi $9.00 Ph $42.50
1. Nuts, Self-locking 2. Aircraft—Parts—Interchangeability 3. AAF TO 00-45H-2

PB 91756

U. S. Air Force.
Lockheed: Installation of emergency fuel pumps—FP-80A, P-80A, and P-80B. Mar 1948. 2p tables Mi $1.25 Ph $1.25
1. Pumps, Fuel—Installation 2. Pumps, Fuel—Aircraft 3. FP-80A (Airplane) 4. P-80A (Airplane) 5. P-80B (Airplane) 6. AAF TO 01-75FJ-28

PB 91767

U. S. Air Force.
North American: Operational restrictions on V-1710 engines installed in P-82E, P-82F, and P-82G aircraft. Mar 1948. 1p Mi $1.25 Ph $1.25
1. V-1710 (Aircraft engine) 2. P-82E (Airplane) 3. P-82F (Airplane) 4. P-82G (Airplane) 5. Manifolds 6. AAF TO 01-60JJ-12

PB 93315

U. S. Air Force and U. S. Navy Dept.
Numbers: Aircraft engine serial. Air Force-Navy aeronautical bulletin. Jun 1948. 2p tables Mi $1.25 Ph $1.25
1. Engines, Aircraft 2. AN AB 152d

PB 26457r

U. S. Air Force and U. S. Navy Dept.
Nut: Test club hub lock. Air Force-Navy aeronautical standard. Jul 1948. 1p drawings, table Mi $1.25 Ph $1.25

PB 91776r

U. S. Air Force and U. S. Navy Dept.
Parts catalog: Series R-2800-8, -8W, -10, -10W, -65 aircraft engines. Feb 1948. 41p drawings, tables Mi $2.50 Ph $6.25

1. U. S. Navy Dept. 2. Engines, Aircraft—Parts 3. R-2800-8 (Aircraft engine) 4. R-2800-8W (Aircraft engine) 5. R-2800-10 (Aircraft engine) 6. R-2800-10W (Aircraft engine) 7. R-2800-65 (Aircraft engine) 8. AN 02A 10GB-4-1

PB 21593r

U. S. Air Force and U. S. Navy Dept.

Propeller blades: General specification for steel. Air Force-Navy aeronautical specification. May 1948. 11p drawings, tables Mi $1.75 Ph $2.50

PB 21595r

U. S. Air Force and U. S. Navy Dept.

Propeller hubs: General specification for ground adjustable and controllable pitch. Air Force-Navy aeronautical specification. May 1948. 8p drawings, tables Mi $1.25 Ph $1.25

PB 21616r

U. S. Air Force and U. S. Navy Dept.

Pumps: Power driven hydraulic. Air Force-Navy aeronautical specification. Jun 1948. 23p drawings, graph, tables Mi $2.00 Ph $3.75

PB 88257r

U. S. Air Force and U. S. Navy Dept.

Relays: Direct current. Air Force-Navy aeronautical bulletin. Jun 1948. 3p tables Mi $1.25 Ph $1.25

PB 26452r5

U. S. Air Force and U. S. Navy Dept.

Ring-propeller hug snap. Air Force-Navy aeronautical standard. Apr 1948. 1p drawings, tables Mi $1.25 Ph $1.25

PB 26047r8

U. S. Air Force and U. S. Navy Dept.

Sleeve-coupling. Air Force-Navy aeronautical standard. Jun 1948. 1p drawings, table Mi $1.25 Ph $1.25

PB 92811

U. S. Air Force and U. S. Navy Dept.

Specifications and standards applicable to aircraft engines and propellers—use of. Air Force-Navy aeronautical bulletin. May 1948. 5p Mi $1.25 Ph $1.25

1. Engines, Aircraft—Specifications 2. Propellers—Specifications

PB 93650

U. S. Air Force and U. S. Navy Dept.

Template-propeller blade female. Air Force-Navy aeronautical design standard. 1p Mi $1.25 Ph $1.25

1. Templates 2. Propeller blades—Templates

PB 93648

U. S. Air Force and U. S. Navy Dept.

Template-propeller blade master male. Air Force-Navy aeronautical design standard. Jul 1948. 1p drawings Mi $1.25 Ph $1.25

1. Templates 2. Propeller blades—Templates

PB 93317

U. S. Air Force and U. S. Navy Dept.

Valve-3000 PSI hydraulic check internal ports. Air Force-Navy aeronautical standard. Jun 1948. 1p drawing, table Mi $1.25 Ph $1.25

1. Valves, Hydraulic—Specifications

PB 93309

U. S. Air Force and U. S. Navy Dept.

Valves: Oil dilution and separately mounted priming solenoid. Air Force-Navy aeronautical bulletin. Jun 1948. 1p table Mi $1.25 Ph $1.25

1. Valves, Solenoid—Specifications

PB 40720s2

U. S. Army Air Forces.

Boeing: Periodic inspection and check of propeller governor assemblies—B-29 series and F-13 series. Jul 1947. 1p Mi $1.25 Ph $1.25

1. Propellers—Controls 2. B-29 (Airplane) 3. F-13 (Airplane) 4. Propellers—Governors 5. AAF TO 01-20EJ-1748

PB 40727r

U. S. Army Air Forces.

Boeing: Rudder fabric reinforcement—YB-29, B-29, B-29A, F-13, F-13A, XC-97, and YC-97. Jul 1947. 1p Mi $1.25 Ph $1.25

1. Rudders, Aircraft 2. YB-29 (Airplane) 3. B-29 (Airplane) 4. B-29A (Airplane) 5. F-13 (Airplane) 6. F-13A (Airplane) 7. XC-97 (Airplane) 8. YC-97 (Airplane) 9. AAF TO 01-20EJA-43

PB 45373s

U. S. Army Air Forces.

Curtiss: Installation of lower cylinder drain lines—C-46D and C-46F. Jun 1947. 1p Mi $1.25 Ph $1.25

1. AAF TO 01-25LA-200A

PB 80422s

U. S. Army Air Forces.

Fairchild: Modification of airesearch heat exchangers and pollak exhaust collector assemblies—C-82A Jul 1947. 1p Mi $1.25 Ph $1.25

1. AAF TO 01-1156BA-22A

PB 41953r2

U. S. Army Air Forces.

General: Installation of stainless steel self-locking nuts on engine exhaust port studs-B17, F-9 B-25, F-10, C-87, C-88, C-117, A-26B, AT-7, AT-11, OA-10A, P-47M, P-47N, P-61C, and F-15 series. Jul 1947. 1p Mi $1.25 Ph $1.25

1. Nuts, Self-locking 2. Engines, Aircraft 3. AAF TO 01-1-282

PB 87534r

U. S. Army Air Forces

Handbook of instructions with parts catalog for Piston type pumps PF-713 series (Vickers). (Tech Order 03-30CH-1). Sep 1947. 10p Mi $1.25 Ph $1.25

PB 92365

Wilson, L. T.

Chemical method of removing the lead from used silver-lead bearings. Feb 1941. 4p photo Mi $1.25 Ph $1.25

1. Bearings—Reclamation—Australia

PB 92366

Wilson, L. T. and Worner, H. W.

Manufacture of a complete silver-lead-indium master rod bearing for the single row wasp. Jan 1941. 4p photo Mi $1.25 Ph $1.25

1. Bearings, Rod end—Australia

PB 92347

Woods, M. W.

Note on the testing of sparking plugs under pressure. 1941. 11p graphs, tables Mi $1.75 Ph $2.50

1. Spark plugs—Tests—Australia

PB 92356

Worner, H. W.

Inspection of some locally made Pegasus bearings. Jan 1941. 4p Mi $1.25 Ph $1.25

1. Bearings—X-ray inspection—Australia
2. Pegasus (Bearings)

PB 92363

Worner, H. W.

Inspection of some unserviceable Pegasus floating bushes. Apr 1941. 6p photos, tables Mi $1.25 Ph $1.25

1. Pegasus (Bearings)

PB 92358

Worner, H. W.

Radiographs and microscopic examination of locally made Pegasus bearings. Dec 1940. 8p photos Mi $1.25 Ph $1.25

1. Pegasus (Bearings)

PB 92368

Worner, H. W.

Technique for casting copper-lead bearings—Jan 1942. 11p photos Mi $1.75 Ph $2.50

1. Metals, Bearing—Copper alloys—Australia

PB 92359

Worner, H. W.

Technique for preparing copper-lead bearings. Nov 1940. 8p photos, drawing Mi $1.25 Ph $1.25

1. Metals, Bearing—Silver alloys—Australia
2. Bearings—Manufacture—Australia

PB 92409

Worner, H. W. and Tabor, D.

Wear of Wasp cylinder barrels. Effect of nitriding the chrome molybdenum. Nov 1941. 7p photos, tables Mi $1.25 Ph $1.25

1. Tabor, D. 2. Liners, Cylinders—Australia
3. Piston rings—Wear—Australia

Training and Training Devices

PB 44114r

U. S. Air Force

Bombing, gunnery and identification training equipment-use of safety tow webbing assembly when towing aerial targets for fighter aircraft. (Tech Order 28-10A-15). Nov 1947. 2p Mi $1.25 Ph $1.25

PB 91751

U. S. Air Force.

Set: Mobile training unit, polar maintenance and operation. Feb 1948. 3p tables Mi $1.25 Ph $1.25

1. Training units—Equipment 2. AAF TO 00-30-1016

PB 91757

U. S. Air Force.

Set: Training, individual, officer, statistical control. Feb 1948. 2p tables Mi $1.25 Ph $1.25

1. Training equipment—Statistical control officers 2. T. Statistical control officers' training equipment 3. AAF TO 00-30-1134

PB 91752

U. S. Air Force.

Set: Training, individual, operator machine, tabulating. Feb 1948. 2p tables Mi $1.25 Ph $1.25

1. Training equipment—Tabulating machine operators 2. Tabulating machines—Operators—Training equipment 3. AAF TO 00-30-1011

PB 91753

U. S. Air Force.

Set: Training, individual, technician, transportation, air. Feb 1948. 2p tables Mi $1.25 Ph $1.25

1. Training equipment—Air transportation technicians 2. T. Air transportation technicians' training equipment 3. AAF TO 00-30-1046

PB 93308

U. S. Air Force and U. S. Navy Dept.

Trainer: Aircraft navigational plotter. Air Force-Navy aeronautical specification. May 1948. 6p diagr, tables Mi $1.25 Ph $1.25

1. Plotters, Course—Specifications

PB 92981

U. S. Air Force and U. S. Navy Dept.
Trainer: Demonstrator, electrical thermometer bulb. Air Force-Navy aeronautical specification. May 1948. 5p Mi $1.25 Ph $1.25
I. Trainers, Instrument

PB 92459

U. S. Air Force and U. S. Navy Dept.
Trainer: Weather condition demonstrator. Air Force-Navy aeronautical specification. Apr 1948. 6p drawing, tables Mi $1.25 Ph $1.25
I. Weather condition demonstrator

Aerodynamics

PB 79360

Temple, G.
The method of characteristics in supersonic flow. (Gt. Brit. Aeronautical Res. Council Rept. and Memo. 2091; British Commonwealth Scientific Office Rept. 33-83-145). Jan 1944. 17p Mi $1.75 Ph $2.50
This report gives an account of the Ackeret-Prandtl-Busemann method of characteristics for the graphical solution of problems of supersonic flow. The theory has been developed anew from a physical point of view so as to expose just those properties of characteristics which are required for practical application to supersonic problems. The necessary numerical tables are included.

PB 85904

U.S. David W. Taylor Model Basin, Carderock, Md.
Air flow through small segements of armor gratings with duct approaches. (Rept 463) Jan 1940 110 Mi $1.75 Ph $2.50
This report summarizes the data on airflow thus far obtained, and offers comment on their value and significance for fullscale design. The data on noise requested in 1930, appear not to have been taken because of lack of facilities. One figure, three graphs and four tables are included. Search of files, examination of records, and preparation of this summary have been carried out by W. P. Roop, then Lt. Commander (CC), U. S. N. The original experimental work is believed to have been done by persons no longer attached to the Model Basin staff.

Rockets and Jet Propulsion

PB 92031

Slyh, J. A. and others.
Refractory oxides as materials of construction for rocket motors. Feb 1948. 16p tables Mi $1.75 Ph $2.50
I. Oxides, Refractory 2. Rocket motors—Combustion chambers 3. Rocket motors—Materials

PB 93310

U. S. Air Force and U. S. Navy Dept.
Engines: Designation of aircraft rocket. Air Force-Navy aeronautical bulletin. Jun 1948. 3p tables Mi $1.25 Ph $1.25
I. Rocket motors—Designation

Land Transportation

PB 92403

Bowden, P. and Kennedy, W. B.
Wear of producer gas engines. Oct 1940. 6p tables Mi $1.25 Ph $1.25
I. Engines, Producer gas—Australia

PB 92405

Bowden, F. P. and Kennedy, W. B.
Wear of producer gas engines. Oct 1940. 11p tables Mi $1.75 Ph $2.50
I. Engines, Producer gas—Australia

PB 92374

Courtney-Pratt J. S., Peart, J., and Tabor, D.
Wear of brake bank materials on cast iron. Nov. 1942. 6p graphs, tables Mi $1.25 Ph $1.25
I. Brakes—Linings—Tests—Australia

PB 92417

Courtney-Pratt J. S. and others.
Wear of brake band materials on cast iron in the presence of water, oil and dust. Jan 1943. 9p graphs, tables Mi $1.25 Ph $1.25
I. Brakes—Linings—Tests—Australia

PB 92410

Garrioch, L. T. and Kennedy, W. B.
Engine wear in producer gas vehicles. Nov 1941. 13p tables (1 fold) Mi $1.75 Ph $2.50
I. Engines, Producer gas—Australia 2. Cylinders—Wear—Australia

PB 92371

Garrioch, L. T.
Successive wear measurements on victorian railways truck. Oct 1941. 5p tables Mi $1.25 Ph $1.25
I. Trucks—Engines—Wear—Australia

PB 92776

Peabody, P. E.
I. MAN WV 22/30 engine. II. Daimler-Benz V-12 MB-806 and V-12 MB-500 engines. III. Hydraulic dynamometer. Dec 1945. 10p Mi $1.25 Ph $1.25
I. WV 22/30 (Engine) 2. Engines, Diesel—Automotive—Germany 3. V-12 MB 806 (Engine) 4. V-12 MB 500 (Engine) 5. Engines, Diesel—Lubricating oils—Germany 6. Maschinenfabrik Augsburg-Nürnberg A. G., Nürnberg, Ger. 7. Daimler-Benz A. G., Mannheim, Ger.

PB 92395

Spink, J. A. and others.
Wear of army truck brake materials on cast iron in the presence of water, oil and dust. Oct 1943. 8p graphs, tables Mi $1.25 Ph $1.25
I. Rubber, Latex—Properties—Australia 2. Brakes—Linings—Tests—Australia

PB 47680r

U. S. Army Air Forces
Inspection, maintenance, storage and disposition of vehicle tires and tubes. (Tech Order 19-1-125). Sep 1947. 10p Mi $1.25 Ph $1.25

PB 91758

U. S. Air Force.
Set: Training, individual, officer, maintenance and repair, automotive. Feb 1948. 11p tables Mi $1.75 Ph $2.50
I. Mechanics, Automotive—Training equipment 2. AAF TO 00-30-1075

PB 45083s

U. S. Air Force
Trucks and trailers—removal of side dispensing equipment on fuel servicing semi-trailers, types F-1, F-1A, F-2 and F-2A. (Tech Order 19-25C-10A). Dec 1947. 1p Mi $1.25 Ph $1.25

PB 93625

U. S. Ordnance Dept.
Ordnance supply catalog: Interchangeability list for ordnance general purpose and combat vehicles (except full track vehicles). Dec 1944. 764p tables Mi $9.00 Ph $96.25
I. Ordnance 2. Catalogs, Supply 3. ASF Cat ORD 14-2, Vol 1

PB 93626

U. S. Ordnance Dept.
Ordnance supply catalog: Interchangeability list for ordnance general purpose and combat vehicles (except full track vehicles). Jun 1945. 974p Mi $9.00 Ph $122.50
I. Ordnance 2. Catalogs, Supply 3. ASF Cat ORD 14-2, Vol 2

PB 93627

U. S. Ordnance Dept.
Ordnance supply catalog: Interchangeability list for ordnance general purpose and combat vehicles (except full track vehicles). Jun 1945. 639p Mi $9.00 Ph $80.00
I. Ordnance 2. Catalogs, Supply 3. ASF Cat ORD 14-2, Vol 3

Marine Transportation

PB 92425

Australia. Council for Scientific and Industrial Research. National Standards Laboratory. Physics Section.
Report on the effective visibility range of ships at night. Jul 1943. 5p table Mi $1.25 Ph $1.25
I. Range, Visual—Tests—Australia
This report described tests carried out at this Laboratory to determine the ranges at which the orientation of a ship can be determined for various sky glow backgrounds, and for similar conditions the range at which it is thought a submarine could make a successful attack. An appendix is attached, giving some estimated maximum background brightnesses over the city under various conditions.

PB 92298

Landweber, L.
Hydrodynamic forces on an anchor cable. Nov 1947. 13p graphs, tables Mi $1.75 Ph $2.50
I. Cables, Anchor 2. Hydrodynamics

PB 59309

Sempaku (Shipping). Vol. 17, no. 6. Jun 1944. 53p photos, drawings, graphs, tables (Text in Japanese) Mi $2.75 Ph $7.50
I. Ships—Construction—Periodicals—Japan

PB 59308

Sempaku (Shipping). Vol. 17, no. 7. Jul 1944. 51p photos, diagrs, drawings, tables (Text in Japanese) Mi $2.75 Ph $7.50

PB 59307

Sempaku (Shipping). Vol. 17, no. 8. Aug 1944. 51p photos, diagrs, drawings, tables (Text in Japanese) Mi $2.75 Ph $7.50

PB 93236

Shepheard, R. B. and others.
Interrogation of Dr. Georg Schnadel: Fractures in welded ships. Jun 1948. 4p table, graph Mi $1.25 Ph $1.25
I. Ships—Welding—Germany 2. Welds—Fractures—Germany

PB 4679s

Shipbuilding. Deck machinery and cranes. Oct 1945. 2p Mi $1.25 Ph $1.25
Index to Micro FIAT S 4 (PB 4679)

PB 4691s

Shipbuilding. Deck machinery and cranes. Oct 1945. 2p Mi $1.25 Ph $1.25
Index to Micro FIAT S 5 (PB 4691)

PB 92959

Sommerville, Alexander R. and others.
Wagner natural circulation boiler. n.d. 362p diagrs, drawings (34 fold), graphs (11 fold), tables (10 fold) Mi $9.00 Ph $46.25
Legends in German and/or English
I. Boilers, Marine 2. Wahodag, Hamburg, Ger. 3. Germany. Oberkommando der Kriegsmarine 4. Blohm & Voss, K.G., Hamburg, Ger. 5. Deutsche Werke Kiel A.G.,

Kiel, Ger. 6. Krupp, Friedrich, Germaniawerft A. G., Kiel, Ger. 7. Meyer, Rudolf Otto, Hamburg, Ger. 8. Schäffer & Budenberg G.m.b.H., Hamburg, Ger. 9. Deutsche Schiff-und Maschinenbau A. G., Bremen, Ger. 10. BIOS FR 1264

PB 59258

Suikosha kiji (Naval club news). Vol 39, no 3. Sept 1941. 181p photos, diagr, tables (Text in Japanese) Mi $6.75 Ph $23.75

PB 59259

Suikosha kiji (Naval club news). Vol 39, no. 9. Mar 1941. 193p photos, drawings, tables (Text in Japanese) Mi $7.00 Ph $25.00

PB 59257

Suikosha kiji (Naval club news). Vol 40, no 2. Jun 1942. 151p tables (Text in Japanese) Mi $6.00 Ph $20.00

PB 59256

Suikosha kiji (Naval club news). Vol 41, no 1. Mar 1943. 135p tables (Text in Japanese) Mi $5.50 Ph $17.50

PB 59255

Suikosha kiji (Naval club news). Vol 41, no 2. Jun 1943. 95p tables (Text in Japanese) Mi $4.25 Ph $12.50

PB 59254

Suikosha kiji (Naval club news). Vol 41, no 3. Sep 1943. 192p (Text in Japanese) Mi $7.00 Ph $25.00

PB 59993

Tensoku reki (Navigation observation almanac) no 681. 1945. 390p fold diagrs, tables (Text in Japanese) Mi $9.00 Ph $48.75
1. Astronomical tables—Japan 2. Astronomy—Japan 3. Japan. Navy. Hydrographical Department

PB 59994

Tensoku reki (Navigation observation almanac) no 681. 1946. 408p fold diagrs, tables (Text in Japanese) Mi $9.00 Ph $51.25
1. Japan. Navy. Hydrographical Department

PB 87521s

U. S. Air Force.
Boats and marine engines: Accomplishment of temporary boat equipment check lists. Feb 1948. 2p tables Mi $1.25 Ph $1.25
1. AAF TO 19-85A-5A-1

PB 87514r

U. S. Army Air Forces.
Parts catalog USAF rescue boat 24-foot. Nov 1947. 38p photos, diagrs Mi $2.25 Ph $5.00
1. Boats, Rescue—Parts 2. AAF TO 19-85AG-4

PB 82450

U. S. Bureau of Ships.
Parts and instruction books 1-7. Internal combustion engines: Navy type DA-25, Navy type DB-60, Navy type DC-105, Navy type DA; General Motors 3-268A; Gray marine 64-YTL3, gray marine 65-YTL3, gray marine 64HN. n.d. 696f illus Mi $9.00 Enl Pr $91.25

PB 89769

U. S. Bureau of Ships.
Tentative ventilation standard: Serial No. 7c. Balancing and testing of ventilation systems on surface vessels. Nov 1943. 20p drawings Mi $1.75 Ph $2.50
1. Ventilation—Ships

PB 92795

Walker, W. S. and McDonald, J. G.
Production of ship armour in Italy. May 1946. 174p photos, drawings, graphs, tables Mi $6.50 Ph $22.50
1. Ships—Armor and armor plate—Italy 2. BIOS FR 1670

WATER SUPPLY, SANITATION AND PUBLIC HEALTH

PB 92300

Black, F. S.
Water supply study, Kure, Japan. Apr 1948. 31p tables Mi $2.25 Ph $5.00
1. Water supply—Kure, Japan 2. Water supply—Equipment—Kure, Japan

PB 92482

Black, F. S.
Water supply study, Yokosuka, Japan. Mar 1948. 49p tables Mi $2.50 Ph $6.25
1. Water supply—Yokosuka, Japan 2. Water supply—Equipment—Yokosuka, Japan

PB 73930s

Haase, L. W.
Anti-corrosion treatment and water purification. 1947. 3p Mi $1.25 Ph $1.25
1. Micro FIAT A 66, Frames 1-87, abstract

PB 88223

Sheridan, Arthur V. and others.
Sewage and water works: Mannheim, Ludwigshafen, Neustadt, Karlsruhe and Stuttgart. Jul 1945. 1p Mi $1.25 Ph $1.25
1. Waterworks—Germany

PB 87331

Truelsen, Christian
Bestimmung der rohrbrunnen-abmessungen. (Determination of shaft diameters). 1944. 20p diagrs, drawings, graph, tables (Text in German) Mi $1.75 Ph $2.50
1. Waterworks—Germany

PB 93285

Asahina, Syoziro

On the life history of epiophlebia superstes (odonata, anisozygoptera). n.d. 6p diagrs, map, graph Mi $1.25 Ph $1.25

I. Dragon flies—Japan

PB 89093

Austin, O. L. and others.

Japanese ornithology and mammalogy during World War II. Jan 1948. 46p tables Mi $2.00 Ph $5.00

I. Ornithology—Japan 2. Mammalogy—Japan 3. SCAP NRS 102

PB 84271

Bayreuth, Scientific Library.

Russian periodicals on biochemistry and petroleum. 1940-1941. 778 illus (Text in Russian) Mi $7.00 Enl Pr $79.00

I. Biological chemistry—Periodicals—Russia 2. Petroleum—Periodicals—Russia 3. Micro FIAT D 322, Frames 5488-6265

PB 82324

Bayreuth. Scientific Library.

Russian publications on biology, organic chemistry, and spinning. 1939-1941. 853f illus (Text in Russian) Mi $7.00 Enl Pr $87.00

I. Biology—Russia 2. Chemistry, Organic—Russia 3. Spinning industry—Russia 4. Micro FIAT D 330, Frames 2455-3307

PB 82322

Bayreuth. Scientific Library.

Russian periodicals on chemical technology and engineering. 1940-1941. 831f illus (Text in Russian) Mi $7.00 Enl Pr $85.00

Continued on PB 84268

I. Chemistry, Technical—Periodicals—Russia 2. Engineering—Periodicals—Russia 3. Micro FIAT D 323, Frames 6266-7096

PB 84318

Bayreuth. Scientific Library.

Russian periodicals on chemistry and physics. 1941. 854f illus (Text in Russian) Mi $7.00 Enl Pr $87.00

I. Chemistry—Periodicals—Russia 2. Physics—Periodicals—Russia 3. Micro FIAT D 303, Frames 1-854

PB 84268

Bayreuth. Scientific Library.

Russian periodicals on physics and chemistry. 1940. 889f illus (Text in Russian) Mi $7.00 Enl Pr $90.00

Continued from PB 82322

I. Chemistry—Periodicals—Russia 2. Physics—Periodicals—Russia 3. Micro FIAT D 324, Frames 7097-7985

PB 84275

Bayreuth. Scientific Library.

Russian periodicals on science. 1940-1941. 803f illus (Text in Russian) Mi $7.00 Enl Pr $82.00

I. Science—Periodicals—Russia 2. Micro FIAT D 311, Frames 6807-7610

PB 84270

Bayreuth. Scientific Library.

Russian periodicals on science and chemical technology. 1940-1941. 368f illus (Text in Russian) Mi $7.00 Enl Pr $38.00

I. Chemistry, Technical—Periodicals—Russia 2. Science—Periodicals—Russia 3. Micro FIAT D 312, Frames 7611-7978

PB 74252

Bayreuth. Scientific Library.

Russian periodicals on technology, chemistry, and botany. 1933. 872f illus (Text in Russian) Mi $9.00 Enl Pr $113.75

Continuation of Micro FIAT D 317 (PB 74256)

I. Technology—Periodicals—Russia 2. Chemistry—Periodicals—Russia 3. Botany—Periodicals—Russia 4. Micro FIAT D 318, Frames 2704-3575

PB 82323

Bayreuth. Scientific Library.

Russian periodicals on technology, engineering, and medicine. 1939-1941. 815f illus (Text in Russian) Mi $7.00 Enl Pr $83.00

I. Technology—Periodicals—Russia 2. Micro FIAT D 325, Frames 7986-8800

PB 92785

British Intelligence Objectives Sub-Committee

Maschinenwesen mit anderen nuetzlichen ausdruecken. (General engineering words and expressions). n.d. 33p Mi $2.25 Ph $5.00

I. Engineering—Dictionaries

PB 92178

British Intelligence Objectives Sub-Committee

Geometrie, Physik, Mathematik, Berechnungen, messungen, zeichnungen, und andere nuetzliche ausdruecke. (Geometry, physics, mathematics, calculations, measurements, drawings, and other useful terms). n.d. 39p Mi $2.25 Ph $5.00

I. Physics—Dictionaries 2. Mathematics—Dictionaries

PB 92275

Cameron, Margaret

Utilization of peat. Sep 1947. 32p Mi $2.25 Ph $5.00

I. Peat—Uses 2. NRCC 1623

PB 59807

Chirigaku Hyoron (Geographical review of Japan). Vol 19, no 2. Feb 1943. 68p photos, diagrs, maps, graphs, tables (Text in Japanese) Mi $3.00 Ph $8.75

Title and table of Contents in Japanese and English

PB 59806

Chirigaku Hyoron (Geographical review of Japan). Vol 19, no 3. Mar 1943. 66p photos, diagrs, maps, graphs, tables (Text in Japanese) Mi $3.00 Ph $8.75

Title and table of Contents in Japanese and English

PB 59805

Chirigaku Hyoron (Geographical review of Japan). Vol 19, no 4. Apr 1943. 61p photos, diagrs, maps, graphs, tables (Text in Japanese) Mi $3.00 Ph $8.75

Title and table of Contents in Japanese and English

PB 59804

Chirigaku Hyoron (Geographical review of Japan), Vol 19, no 6. Jun 1943. 85p photos, diagrs, maps, tables (Text in Japanese) Mi $3.75 Ph $11.25

Title and table of Contents in Japanese and English

PB 59803

Chirigaku Hyoron (Geographical review of Japan), Vol. 19, no 11. Nov 1943. 80p photos, diagrs, maps, tables (Text in Japanese) Mi $3.50 Ph $10.00

Title and table of Contents in Japanese and English

PB 59802

Chirigaku Hyoron (Geographical review of Japan). Vol 20, no 4. May 1944. 30p diagrs, tables (Text in Japanese) Mi $2.00 Ph $3.75

PB 59801

Chirigaku Hyoron (Geographical review of Japan), Vol 20, no 6. Aug 1944. 32p photos, diagrs, graphs, tables (Text in Japanese) Mi $2.25 Ph $5.00

1. Periodicals—Japan 2. Geography—Periodicals—Pacific region

PB 92956

Day, J. W. and Wilks, T. G.

German hair, toilet, horse and cattle clipper industry. n.d. 26p Mi $2.00 Ph $3.75

1. Clippers, Hair—Manufacture 2. BIOS FR 730

PB 91068

Drägerwerk, Lübeck, Ger.

Diving equipment. 1935-1945. 232f drawings, charts (Text in German) Mi $8.25 Enl Pr $31.25

Referred to on pp. 225-262 of BIOS FR 110 (PB 49245)

For abstract see PB 91068s 2p Mi $1.25 Ph $1.25

1. Diving equipment—Germany 2. Taucher Automat D. 6000 (Pressure regulating valve) 3. Suits, Diving—Germany 4. Helmets, Diving—Germany 5. Micro 6. BIOS FR 100.

PB 93286

Esaki, Teiso

Zoogeographical consideration of the insect fauna in the Pacific islands. n.d. 12p Mi $1.75 Ph $2.50

1. Fauna—Pacific Islands 2. Geographical distribution of animals and plants

PB 90982

Foam fire extinguishing apparatus. 1939-1944. 161f photos, diagrs (Text in German) Mi $6.25 Enl Pr $22.50

Contains English translations from the German on test reports

Referred to in App. B of BIOS FR 697, Items 30-31 (PB 49235)

For abstract see PB 90982s 2p Mi $1.25 Ph $1.25

1. Fire extinguishers, Foam—Germany 2. BIOS FR 697

PB 62252

Fuji (Peerless), no 39. Jan 1945. 25p photos, diagrs, tables (Text in Japanese) Mi $2.00 Ph $3.75

PB 93276

Furukawa, Haruo

Revision of Metrioptera of Japan with reference to its allies. n.d. 11p drawings Mi $1.75 Ph $2.50

1. Metrioptera—Japan

PB 93762

Göppinger Kaliko-Kunstleder-Werke, Göppingen, Ger.

Various light-weight coated or impregnated fabrics, including some artificial leather, sample book no. F-464-44; tracing cloth, sample book no. F-464-44a. n.d. 73 samples only

For loan and reference use only

Legends in German

1. Sample book F-464-44 2. Sample book F-464-44a 3. Fabrics, Coated—Samples—Germany 4. Fabrics, Impregnated—Samples—Germany 5. Leather, Synthetic—Samples—Germany

PB 93333

Goshorn, J. C. and Gross, William E.

Packing of sorbents in canisters. Jan 1948. 23p photos, drawings, tables Mi $2.00 Ph $3.75

1. Respirators—Canisters

PB 93518

Germany. Reichsforschungsrat Planungsamt.
Vorlesungsverzeichnisse der deutschen hochschulen. (Collection of university catalogues). 1943-1944. 1147f photos (Text in German) Mi $9.00 Enl Pr $150.00
1. Schools—Germany 2. Micro FIAT BB 45, Frames unnumbered

PB 87989

Heinroth, O.
Beutemachen und fressen bie einer ringelnatter und einer klapperschlange. (Preying and eating habits of a ringsnake and a rattlesnake). 1944. 5p (Text in German) Mi $1.25 Ph $1.25
Accompanying text for the educational film C 441
1. Snakes—Germany

PB 87958

Herter, K.
Dressur der elritze (Phoxinus laevis) auf verschieden grosse optische signale. (Training the minnow (Phoxinus laevis) with large optical signals). 1937. 3p diagr, graph (Text in German) Mi $1.25 Ph $1.25
Accompanying text for the educational film C 178
1. Fish—Training—Germany

PB 93766

Hoare, A. H. and others.
Some agricultural aspects in Germany during the period 1939-1945. 1948. 12p
Available from British Information Services, 30 Rockefeller Plaza, New York 20, N. Y. at $.15
1. Agricultural research—Germany 2. Agricultural machinery—Germany 3. BIOS OR 6

PB 62112

Hokkaido Teikoku Daigaku. Kogakubu kiyo. (Hokkaido Imperial University. Memoirs of the faculty of engineering). Vol 6, no. 3. Apr 1941. 36p diagrs, graphs, tables Mi $2.25 Ph $5.00
English translation from Japanese
1. Engineering—Japan 2. Gas oil—Hydro-cracking—Japan 3. Propene, 2-Methyl—Hydrogenation—Japan 4. Fuels, Automotive—Production—Japan

PB 62111

Hokkaido Teikoku Daigaku. Kogakubu Kiyo. (Hokkaido Imperial University. Memoirs of the faculty of engineering). Vol. 6, no. 4. Aug 1941. 167p photos, diagrs, graphs, (1 fold), tables (Text in German) Mi $6.25 Ph $21.25
German translation from Japanese
Title in Japanese and English
1. Engineering—Japan 2. Cameras, Motion picture—Japan

PB 62110

Hokkaido Teikoku Daigaku. Kogakubu kiyo (Hokkaido Imperial University. Memoirs of the faculty of engineering) Vol. 6, no 5. Apr 1942. 69p diagrs, graphs, tables (Text in German) Mi $3.00 Ph $8.75
German translation from Japanese
Title in Japanese and English
1. Engineering—Japan 2. Vibration—Japan 3. Geometry, Plane—Japan

PB 25633s9

I. G. Farbenindustrie A. G., Ludwigshafen, Ger.
Scientific and technical acitivty: Work by order of the factory management and dealing with factory problems. n.d. 27p diagr Mi $2.00 Ph $3.75
Supplement 9 to PB 25633
1. Factory management—Germany

PB 91054

I. G. Farbenindustrie A. G., Schkopau, Ger.
Statistics of staff wages. 1939-1944. 76f tables (Text in German) Mi $3.50 Enl Pr $11.25
For abstract see PB 91054s 1p Mi $1.25 Ph $1.25

PB 84439

Illustrierte Technische Wörterbücher. (Illustrated technical dictionaries). V. 18-19. 1910. 588f illus (Text in German, English, French, Russian, Italian and Spanish) Mi $9.00 Enl Pr $77.50
1. Schlomann, Alfred, ed. 2. German language—Dictionaries—English 3. German language—Dictionaries—French 4. German language—Dictionaries—Russian 5. German language—Dictionaries—Italian 6. German language—Dictionaries—Spanish 7. Micro FIAT K 66, Frames 3051-3643

PB 74567s

Institut für Ernährungs- und Verpflegungswissenschaft, Berlin.
Annual report dealing with fat synthesis, vitamins, ferments, and preservation of foods and pesticides. 1946. 2p Mi $1.25 Ph $1.25
Supplement 1 to PB 74567
Abstracts to Micro FIAT J 241, Frames 1-58.

PB 93277

Ishihara, Tamotsu
Some notes on the Chinese species of the genus Acanthosoma Curtis, 1824 (Hemiptera: Pentatomidae). n.d. 6p photos, drawings Mi $1.25 Ph $1.25
1. Hemiptera—Japan 2. Ehime Agricultural College, Matsuyama, Japan

PB 93263

Japan. Ministry of Education. Scientific Education Bureau. Scientific Data Section.

List of the learned societies of science and technology. Mar 1948. 78p Mi $3.50 Ph $10.00
I. Scientific societies—Japan

PB 93261

Japan. Ministry of Education. Scientific Education Bureau. Scientific Data Section.
Short biography of Japanese scientists. Vol III. Jan 1948. 376p Mi $9.00 Ph $47.50
I. Scientists—Biography—Japan

PB 93262

Japan. Ministry of Education. Scientific Education Bureau. Scientific Data Section.
Short biography of Japanese scientists. Vol IV. Jan 1948. 867p Mi $9.00 Ph $108.75
I. Scientists—Biography—Japan

PB 17652s

Joint Intelligence Objectives Agency.
Selected books requested for microfilming on economics and international patent regulations. Jan 1946. 1p (Text in German and English) Mi $1.25 Ph $1.25
Index to Micro FIAT W 55 (PB 17652)

PB 93278

Kanda, Sigeo
On the genus Kuwania of Japan. n.d. 8p tables Mi $1.25 Ph $1.25
I. Scale insects—Japan

PB 62205

Kantoshu kojo tokei (Kwantung Territory Factory Statistics, 1939 A). Feb 1941. 11p tables (Text in Japanese) Mi $1.75 Ph $2.50
I. Japan—Industries—Statistics

PB 62207

Kantoshu kojo tokei (Kwantung Territory Factory Statistics, 1939 B). Feb 1941. 242p tables (Text in Japanese) Mi $9.00 Ph $31.25

PB 62253

Keihin kogyo (Tokyo—Yokohama industry). Vol. 4, no. 38. Mar 1942. 33p diagrs (1 fold), tables (Text in Japanese) Mi $2.25 Ph $5.00
2. Japan—Industries—Periodicals

PB 62244

Keizai geppo (Economic monthly). Vol. 18, no. 11. Nov 1944. 43p tables (Text in Japanese) Mi $2.50 Ph $6.25
I. Economics—Periodicals—China 2. Economics—Periodicals—Japan

PB 59274

Kenkyu hokoku (Research report). Vol. 5, no. 9. Jun 1942. 35p photos, diagrs, graphs, tables (Text in Japanese) Mi $2.25 Ph $5.00

PB 93233

Kersten, Miles S.
Determination of thermal properties of soils for investigation of airfield construction in arctic and subarctic regions. Jan 1948. 96p photos, graphs, tables (1 fold) Mi $4.25 Ph $12.50 (Available at Office of Chief Engineer U. S. Army, Wash. 25, D. C. at $3.00 per copy)
I. Soils—Thermal properties 2. University of Minnesota. Engineering Experiment Station
Thermal conductivity tests have been conducted on 14 different soils. The tests have shown that the coefficient of thermal conductivity varies in the following ways: 1. Above freezing, it increases with an increase in mean temperature. 2. Below freezing, it shows very little change. 3. From below to above freezing, it varies according to its moisture content. For dry soils there is no change; for low moisture contents the frozen value is lower than the unfrozen; for high moisture contents the frozen value is higher. 4. At a constant density, it increases with an increase in moisture content. 5. At a constant moisture content, it increases with an increase in density. The rate of increase is fairly constant and is independent of the moisture content. 6. It is higher for well graded soils with angular particles than for poorly graded soils with rounded particles. 7. It differs appreciably for different soil minerals. The specific heats of a variety of soils are all approximately the same. The values decrease with a decrease in temperature. The specific heat of soil—water mixtures may be calculated by proportion according to the percentages by weight of soil and water and the respective specific heats. The thermal conductivity of lightweight concrete slabs varies according to the density. The test results show a wide variation of thermal conductivities with respect to the various soils; nevertheless, they do serve as a basis for making estimates of thermal conductivities for other soils with the same physical characteristics of mineral composition, gradation, and particle surface as those tested. Specific heat values were found to be quite similar for all soils tested and hence, it appears to be reasonable to assume the same value for other soils.

PB 59995

Kikai kogaku nenkan (Mechanical engineering yearbook). 1941. 552p photos, drawings, graphs, tables (Text in Japanese) Mi $9.00 Ph $70.00

PB 88226

Kilpatrick, J. L.
Technical high school, Karlsruhe, Ger. Jul 1945. 1p Mi $1.25 Ph $1.25

PB 88224

Kilpatrick, J. L.
Technical high school, Munich, Ger. Jul 1945. 1p Mi $1.25 Ph $1.25

PB 92322

Kochin, N. E.
Form taken by the cable of a fixed barrage balloon under the action of wind. 1946. 21p diagrs, tables Mi $2.00 Ph $3.75
1. Balloons, Barrage—Russia 2. Balloons—Cables—Russia 3. Cables—Tests—Russia

PB 62193

Kogyo nenkan (Industrial yearbook). 1942. 1076p photos, tables (Text in Japanese) Mi $9.00 Ph $135.00

PB 59983

Kogyo tokeihyo (Industrial statistics) 1939. Mar 1941. 500p tables (Text in Japanese) Mi $9.00 Ph $62.50
1. Industrial statistics—Japan 2. Factories—Japan

PB 59984

Kogyo tokeihyo (Industrial statistics) 1942. Mar 1944. 497p tables (Text in Japanese) Mi $9.00 Ph $62.50

PB 93287

Kubota, Masao
On some habits of Japanese harvesting ant, Messor aciculum Smith. n.d. 8p photos, graphs Mi $1.25 Ph $1.25
1. Ants—Japan

PB 87963

Kuhl, Willi
Die entwicklung des blaufelchen. (Development of coregonus wartmanni Bloch and coregonus macrophthalmus Nüsslin). 1943. 16p graphs (Text in German) Mi $1.75 Ph $2.50
Accompanying text for the educational film C 406
1. Fish—Germany

PB 92810

Ladejinsky, Wolf I. and others.
Outlook for Japanese agriculture. May 1948. 14p tables Mi $1.75 Ph $2.50
1. Agricultural economics—Japan

PB 92277

Lathe, F. E.
Inventions—and what to do about them. Oct 1947. 35p Mi $2.25 Ph $5.00
1. Inventions 2. NRCC 1624

PB 87984

Martens-Hedenus, Hilda.
Baris-Djauk-Tanz auf Bali. (Baris-Djauk dance of Bali). 1942. 11p photos (Text in German) Mi $1.75 Ph $2.50
Accompanying text for the educational film C 439
1. Rites and ceremonies—Bali

PB 87990

Martens-Hedenus, Hilda.
Ketjak, kinder-barong und kinder-djanger auf Bali. (Ketjak, children's Barong, and children's Djanger dances of Bali). 1941. 12p (Text in German) Mi $1.75 Ph $2.50
Accompanying text for the educational film C 440
1. Bali—Social life and customs 2. Rites and ceremonies—Bali

PB 87982

Matens-Hedenus, Hilda
Speertänze, reiningungszeremonien und totenfeierlichkeiten auf Bali. (Spear dance, purification ceremony (Hindu priest) and cremation in Bali). 1944. 19p diagrs (Text in German) Mi $1.75 Ph $2.50
Accompanying text for the educational film C 438
1. Rites and ceremonies—Bali

PB 87983

Martens-Hedenus, Hilda
Tanzunterricht, Kebyar und legong-tanz auf Bali. (Kebyar and Legong dances of Bali). 1942. 12p photo (Text in German) Mi $1.75 Ph $2.50
Accompanying text for the educational film C 437
1. Rites and ceremonies—Bali

PB 88764

McDermott, Reginald F, and others.
Comparative test of shelter, squad, portable; tent, squad, M-1942; and tent, sectional, hospital. Mar 1948. 28p photos, tables Mi $2.00 Ph $3.75
1. Tents—Tests 2. Shelters, Portable

PB 93288

Mori, Syuiti
Daily periodic emergence of Drosophila and its hereditary contol. n.d. 9p tables Mi $1.25 Ph $1.25
1. Drosophila—Japan 2. Kyoto Imperial University. Faculty of Science. Zoological Institute

PB 87999

Müller, Gerhard
Pfingstkönig: Der pfingstbrauch in Varnhalt. (King of Whitsuntide: The Whitsuntide custom in Varnhalt). 1940. 10p (Text in German) Mi $1.25 Ph $1.25
Accompanying text for the educational film B 456
1. Pentecost festival—Varnhalt, Ger.

PB 92076

National Academy of Sciences. Scientific Advisory Group.
Reorganization of science and technology in Japan. Aug 1947. 56p tables Mi $2.75 Ph $7.50
1. Scientific societies—Organization—Japan 2. Technical societies—Organization—Japan

PB 62028

Nogaku kenkyu (Agricultural research) Vol 32. 1941. 628p photos, graphs, tables (11 fold) (Text in Japanese) Mi $9.00 Ph $78.75

PB 62029

Nogaku kenkyu (Agricultural research) Vol 33. 1942. 636p photos, tables, graphs (1 fold) (Text in Japanese) Mi $9.00 Ph $80.00

PB 62030

Nogaku kenkyu (Agricultural research) Vol 34. 1942. 664p photos (2 fold) diagrs, fold map, tables (1 fold) (Text in Japanese) Mi $9.00 Ph $83.75

PB 62031

Nogaku kenkyu (Agricultural research) No. 35. 1943. 605p photos, diagrs, graphs, tables (6 fold) (Text in Japanese) Mi $9.00 Ph $76.25

PB 62032

Nogaku kenkyu (Agricultural research) Vol 36. 1944. 624p photos (3 fold), diagrs, graphs, tables (7 fold) (Text in Japanese) Mi $9.00 Ph $78.75

PB 59986

Noji shikenjo kenkyu jiho (Research bulletin of the agricultural experiment station, Kungchuling, Manchuokuo), no 35. Apr 1941. 163p photos, diagr, tables (Text in Japanese) Mi $6.25 Ph $21.25
1. Agricultural research—Periodicals—Manchuria 2. Agricultural experiment station—Periodicals—Manchuria

PB 59987

Noji shikenjo kenkyu jiho (Research bulletin of the agricultural experiment station, Kungchuling, Manchoukou), no 36. Aug 1941. 253p photos, diagrs, maps, tables (Text in Japanese) Mi $9.00 Ph $32.50

PB 93299

Nomura, Ken'ichi

On the breeding place and seasonal prevalence of anopheles hyrcanus sinensis wiedemann in Japan. n.d. 4p tables Mi $1.25 Ph $1.25
1. Mosquitoes—Japan 2. Central Meteorological Observatory, Tokyo

PB 93280

Nomura, Sizumu and Nakane, Takehiko

On some new and remarkable species of Aphodiinae from Japan and Formosa. n.d. 22p photos Mi $2.00 Ph $3.75
1. Nakane, Takehiko 2. Aphodius—Japan 3. Aphodius—Formosa

PB 93279

Nomura, Sizumu

Über die Melolontha-arten der umgebung von Japan. (On the genus Melolontha in Japan). n.d. 12p photos, tables Mi $1.75 Ph $2.50
1. Melolontha—Japan

PB 93284

Ohsawa, Wataru and Nagasawa, Sumio

Statistico-physiological analysis of the vital resistibilities to water, kerosene and pyrethrin of the workers of crematogaster brunnea matsumurai forel. n.d. 48p graphs, tables Mi $2.50 Ph $6.25
1. Ants—Japan 2. Kyotō Imperial University. Faculty of Science. Zoological Institute 3. Japan Special Agricultural Product Association, Takatsuki, Japan

PB 62098

Osaka Teikoku Daigaku. Rigakubu Kenkyu Hokoku (Osaka Imperial University. Department of Science Research Report). Vol. 8, section 2 (Physics). Sep 1941. 49p photos, diagrs, graphs, tables (Text in Japanese) Mi $2.50 Ph $6.25

PB 62095

Osaka Teikoku Daigaku. Rigakubu Kenkyu Hokoku (Osaka Imperial University. Department of Science Research Report). Vol. 10, section 2 (Physics). Mar 1944. 20p graphs, tables (Text in Japanese) Mi $1.75 Ph $2.50

PB 88842

Reynolds, Edward A. and Reynolds, Gertrude M.

Industrial project in statistical quality control. Jun 1948. 55p tables, graphs Mimeo: $1.50
1. Syracuse. University. Institute of Industrial Research 2. Statistical methods 3. Quality control 4. Sampling 5. American Society for Quality Control, Syracuse, N. Y.

PB 93332

Rinehart, C. A. and Gross, W. E.

Development of canisters: Lightweight service, auxiliary (Co). M1 and Canisters: Service, auxiliary (Co). M2 for attachment to M10, and mix types of service canisters for protection against carbon monoxide. Jun 1948. 47p photos, drawing, tables (3 fold) Mi $2.50 Ph $6.25
1. Gross, W. E. 2. Respirators—Canisters

PB 93281

Sasa, Manabu and Takahashi, Hiroshi

New records of mosquitoes of Japan. 5p Mi $1.25 Ph $1.25
1. Mosquitoes—Japan

PB 93300

Sasa, Manabu

Zoophilism, hibernation and appearance of mosquitoes of Japan. n.d. 4p tables Mi $1.25 Ph $1.25
1. Mosquitoes—Japan 2. Tokyo. Imperial University. Institute for Infectious Diseases

PB 92000

Sherwin, Leonard, comp.
Fiat microfilm reel index. n.d. 41p
Multilith: $5.00
I. U. S. Office of Technical Services

PB 87977

Spannaus, Günther.
Töpferei (Gbande, nordliberia). (Pottery (Gbande of North Liberia)). 1936. 2p (Text in German) Mi $1.25 Ph $1.25
Accompanying text for the educational film C 30
I. Pottery—Manufacture—Liberia

PB 92075

Supreme Commander for the Allied Powers. Economic and Scientific Section.
Science and technology in Japan. Index to Japanese Research and development during period July—December, 1946. n.d. 202p tables
Mi $7.50 Ph $26.25
I. Scientific research—Project reports—Japan
2. Technical research—Project reports—Japan

PB 92074

Supreme Commander for the Allied Powers. Economic and Scientific Section.
Science and technology in Japan. Research activities of Tokyo Shibaura Electric Company & Subsidiaries. n.d. 49p tables Mi $2.75
Ph $7.50
I. Tokyo Shibaura Electric Co.—History

PB 92127

Supreme Commander for the Allied Powers. Economic and Scientific Section.
Scientific and technological societies of Japan; organization and history of activities to April 1947. Part I. Imperial academy of Japan. National research council. Japanese society for the promotion of science. Oct 1947. 86p tables
Mi $3.75 Ph $11.25
I. Scientific societies—Organization—Japan

PB 92809

Supreme Commander for the Allied Powers. Natural resources section.
Japanese sponge culture experiments in the South Pacific islands. May 1948. 13p Mi $1.75
Ph $2.50
I. Sponges—Japan

PB 91845

Supreme Commander for the Allied Powers. Research and Statistics Div.
Japanese economic statistics. Feb 1948.
106p graphs, tables Mi $4.50 Ph $13.75

PB 92466

Supreme Commander for the Allied Powers. Research and Statistics Div.
Japanese economic statistics. Mar 1948.
104p tables, graphs Mi $4.50 Ph $13.75

PB 59620

Tairiku kagakuin iho (Bulletin of the Institute of Scientific research). Manchuokuo. Vol 7, no. 3. Jun 1943. 100p photos, diagrs, graphs, tables (2 fold) (Text in German) Mi $4.25 Ph $12.50
Title in Japanese and English
I. Scientific research—Periodicals—Manchuria

PB 93290

Takahashi, Ryoichi
Maternal care of some hemiptera of the Malay peninsula. n.d. 8p Mi $1.25 Ph $1.25
I. Hemiptera—Malay Peninsula

PB 93302

Takashima, Haruo
Scorpions of Shansi, North China. n.d. 4p tables Mi $1.25 Ph $1.25
I. Scorpions—China 2. Yamashina's Ornithological Institute, Tokyo

PB 93257

Thompson, Charles L.
Service test of the Waller soldering gun. Jun 1948. 22p photos, graphs Mi $2.00 Ph $3.75
I. Soldering irons

PB 92982

U. S. Air Force and U. S. Navy Dept.
Axes: Emergency escape. Air Force-Navy aeronautical specification. May 1948. 6p Mi $1.25
Ph $1.25
I. Axes

PB 21313r

U. S. Air Force and U. S. Navy Dept.
Cord: Elastic, exerciser. Air Force-Navy aeronautical specification. May 1948. 10p tables
Mi $1.25 Ph $1.25

PB 39920r

U. S. Air Force.
Set: Maintenance, organizational, non-tactical. Feb 1948. 7p tables Mi $1.25 Ph $1.25
Revision 1 of PB 39920
I. AAF TO 00-30-160-1

PB 81924r3

U. S. Air Force.
UR digest. Oct 1947. 85p photos, drawings, tables Mi $3.75 Ph $11.25
Revision 3 of PB 81924
I. AAF TO 00-10-1-3

PB 81924r4

U. S. Air Force.
UR digest. Nov 1947. 185p photos, diagrs, drawings, tables Mi $6.75 Ph $23.75
Revision 4 of PB 81924
I. AAF TO 00-10-1-4

PB 40146r2

U. S. Army Air Forces.
Set: Maintenance, field, welding and blacksmith. Oct 1947. 3p tables Mi $1.25 Ph $1.25
Revision 2 of PB 40146
I. AAF TO 00-30-326-2

PB 41903r

U. S. Army Air Forces
UR digest (Tech Order 00-65-6, rev.) Mar 20, 1947. 30p Mi $2.00 Ph $3.75

PB 85319r

U. S. Army Air Forces.
UR digest. Jun 1947. 147p tables Mi $5.75 Ph $18.75
Revision 1 of PB 85319
I. Aircraft—Maintenance and repair 2. AAF TO 00-65-01-1

PB 81924r2

U. S. Army Air Forces.
UR digest. Aug 1947. 110p photos, diagrs, tables Mi $4.50 Ph $13.75
Revision 2 of PB 81924
I. AAF TO 00-10-1-2

PB 81455

U. S. War Dept.
Japanese military dictionary: Japanese-English—English-Japanese. Aug 1944. 619p Mi $9.00 Ph $77.50 Available also from the Supt. of Docs., Washington 25, D. C. $1.00
I. Japanese language—Dictionaries—English
2. English language—Dictionaries—Japanese
3. Military art and science—Dictionaries—Japanese

PB 93291

Utida, Syunro
Are population fluctuations caused by the host-parasite interaction? n.d. 11p graphs, tables Mi $1.75 Ph $2.50
I. Insects—Parasites—Japan 2. Entomology—Research—Japan 3. Kyotô Imperial University. College of Agriculture

PB 82329

Verein Deutscher Eisenhüttenleute, Düsseldorf, Ger.
Russian publications on engineering and metallurgy. 1936-1940. 742f illus (Text in Russian) Mi $7.00 Enl Pr $76.00
I. Engineering—Russia 2. Metallurgy—Russia
3. Micro FIAT J 255, Frames 2780-3521

PB 93282

Watanabe, Chihisa
A preliminary revision of the genus Aphrastobracon Ashmead (Hymenoptera, Braconidae). n.d. 21p photos Mi $2.00 Ph $3.75
I. Braconidae—Japan 2. Hymenoptera—Japan 3. Hokkaido University, Sapporo, Japan

PB 81924r5

U. S. Air Force.
UR digest. Nov 1947. 164p photos, diagrs, drawings Mi $6.25 Ph $21.25
Revision 5 of PB 81924
I. AAF TO 00-10-1-5

PB 81924r6

U. S. Air Force.
UR digest. Jan 1948. 53p diagrs, drawings Mi $2.75 Ph $7.50
Revision 6 of PB 81924
I. AAF TO 00-10-1-6

PB 85319r2

U. S. Air Force.
UR digest index. Dec 1947. 141p tables Mi $5.75 Ph $18.75
Revision 2 of PB 85319
I. AAF TO 00-65-01-2

PB 89999

U. S. Army.
Stock list of all items, class 19: Blocks, rigging and all accessories, outfits and parts. Nov 1947. 3p tables Mi $1.00 Ph $1.00
I. Blocks, Rigging

PB 87126s2

U. S. Army Air Forces.
Explanation of technical order and stock list system. Jul 1947. 3p tables Mi $1.25 Ph $1.25
Supplement 2 to PB 87126
I. AAF TO 00-5-18-2

PB 42009r4

U. S. Army Air Forces.
List of USAF property to be returned to the United States. Sep 1947. 312p tables Mi $9.00 Ph $40.00
Revision 4 of PB 42009
I. AAF TO CO-35A-32-4

PB 44448r

U. S. Army Air Forces.
Operation and service instructions for free-type parachutes. Aug 1947. 6p photos, drawings Mi $1.25 Ph $1.25
Revision 1 of PB 44448
I. AAF TO 13-5-2-1

PB 62549r

U. S. Army Air Forces
Parachutes—modification of type A-5 parachutes. Jul 1947. 4p drawing, photos Mi $1.25 Ph $1.25
Revision 1 of PB 62549
I. AAF TO 13-5-62-1

PB 40146r3

U. S. Army Air Forces.
Set: Maintenance, field, welding and blacksmith Sept 1947. 3p tables Mi $1.25 Ph $1.25
Revision 3 of PB 40146
I. AAF TO 00-30-326-3

PB 86784

Weisse, Ernst.

Kernfragen der erfindungskunde für den gefolgschaftserfinder. (Vital questions on the inventive faculty for the training of inventors). 1943. 65p diagrs, tables (Text in German) Mi $3.00 Ph $6.75

I. Inventions—Germany 2. Verein Deutscher Ingenieure Verlag G.m.b.H., Berlin

PB 59942

Zenka giren—kagaku gijutsu shuroku (Japanese federation of scientific and technical associations—collection of scientific and technical papers). Vol. I, no. 5. Jul 1943. 25p photos, diagrs, tables, graphs (Text in Japanese) Mi $2.00 Ph $3.75

Includes translated German articles

Titles in Japanese and German

I. Technical research—Periodicals—Germany

PB 59945

Zenka giren—kagaku gijutsu shuroku. (Japanese federation of scientific and technical associations—collection of scientific and technical papers). Vol. I, no. 8. Oct 1943. 27p diagrs, graphs (Text in Japanese) Mi $2.00 Ph $3.75

Includes translated German articles

Titles in Japanese and German

PB 59944

Zenka giren—kagaku gijutsu shuroku. (Japanese federation of scientific and technical associations—collection of scientific and technical papers). Vol. I, no. 9. Nov 1943. 56p diagrs, graphs, tables (Text in Japanese) Mi $2.75 Ph $7.50

Includes translated German articles

Titles in Japanese and German

PB 59943

Zenka giren—kagaku gijutsu shuroku (Japanese federation of scientific and technical associations—collection of scientific and technical papers). Vol. I, no. 10. Dec 1943. 84p photos, diagrs, tables (Text in Japanese) Mi $3.75 Ph $11.25

Includes translated German articles

Titles in Japanese and German

PATENTS

Chemicals and Allied Products

PB 93328

Göhre, O.

Hydrogenation Report—Section 9. (Part E. Schutzrechte). n.d. 158p diagr, graph, tables (Text in German) Mi $6.00 Ph $20.00

I. Hydrogenation—Patents—Germany

PB 13097s

I. G. Farbenindustrie A. G.

Development of patents on the manufacture of industrial chemicals, 1878-1944. Dec 1945. 8p (Text in German and English) Mi $1.25 Ph $1.25

Index to Micro FIAT G 45, Frames 1-1291 (PB 13097)

PB 17672s

I. G. Farbenindustrie A. G.

Papers on fuels, lubricants, and prehydrogenation, Hochdruckversuche Laboratories. Jan 1946. 16p (Text in German and English) Mi $1.75 Ph $2.50

Index to Micro FIAT LF 74, Frames 1-1053 (PB 17672) and Micro TOM 167, Frames 1-1053 (PB 17672)

PB 17673s

I. G. Farbenindustrie A. G.

Patentanmeldungen des hauptlaboratoriums, die an Herrn Direktor Dr. Reppe abgesandt werden. (Patent registrations, Files of Director Reppe, I.G. Farbenindustrie main laboratory, Ludwigshafen). Jan 1946. 1p (Text in German and English) Mi $1.25 Ph $1.25

Index to Micro FIAT C 76, Frames 932-1303 (PB 17673) and Micro TOM 157, Frames 932-1303 (PB 17673)

PB 91043

I. G. Farbenindustrie A. G., Schkopau, Ger.

Lists of chemical patents and patent correspondence. 1940-1944. 394f tables, drawings (Text in German or French) Mi $9.00 Enl Pr $52.50

For abstract, See PB 91043s 2p Mi $1.25 Ph $1.25

I. Maleic acid—Production—Patents—Germany 2. Usines de Melle, Paris, France 3. Butadiene—Patents—France 4. Sulfides, Organic—Production—Patents—Germany

PB 91175

I. G. Farbenindustrie A. G., Schkopau, Ger.

Patent claims relating to manufacturing processes and compositions of plastics, varnishes, chemicals, etc. 1939-1942. 78f tables (Text in German) Mi $3.50 Enl Pr $11.25

For abstract, See PB 91175s 2p Mi $1.25 Ph $1.25

I. Plastics—Manufacture—Patents—Germany 2. Varnishes—Manufacture—Patents—Germany 3. Chemicals—Production—Patents—Germany

PB 91111

I. G. Farbenindustrie A. G., Schkopau, Ger.

Patent drafts and applications relating to butadiene products for the paints, plastics and rubber industries. 1941-1944. 33f tables (Text in German) Mi $2.25 Enl Pr $6.25

For abstract See PB 91111s 2p Mi $1.25 Ph $1.25

I. Butadiene—Patents—Germany

PB 91183

I. G. Farbenindustrie A. G., Schkopau, Ger.

Patent application for winding of plastic materials, of natural and synthetic origin. 1943. 4f drawings (Text in German) Mi $1.25 Enl Pr $2.50

For abstract, See PB 91183s 1p Mi $1.25 Ph $1.25

I. Plastics—Winding—Patents—Germany

PB 91167

I. G. Farbenindustrie A. G., Schkopau, Ger.

Patent specifications and correspondence relating to polyvinylchloride and polymers based on vinylchloride. 1943-1944. 182f tables (Text in German) Mi $6.75 Enl Pr $25.00

For abstract, see PB 91167s 2p Mi $1.25 Ph $1.25

1. Polyvinyl chloride—Patents—Germany 2. Vinyl chloride—Polymers—Patents—Germany

Instruments

PB 93596

Instrumente. Klassen 42,51.

(Auszüge. Deutscher patent-anmeldungen).

Instruments. Classes 42,51.

(Abstracts of German patent applications). (Vol. 10 of the series). n.d. 101lp (Text in German) Mimeo: $25.25

1. Instruments, Optical—Patents—Germany 2. Musical instruments—Patents—Germany 3. Series: Auszüge Deutscher patent-anmeldungen. Vol. 10

Machinery

PB 81800s

Auszüge Deutscher patent-anmeldungen: Brennkraftmaschinen. (Klasse 46). (Extracts of German patent applications: Internal combustion engines (Class 46). List by sub-classes. Mar 1947. 129p tables Mi $5.00 Ph $16.25

Supplement 1 to PB 81800

1. Engines, Internal combustion—Patents—Index—Germany 2. Servomechanisms—Patents—Index—Germany

Rubber and Rubber Products

PB 91110

I. G. Farbenindustrie A. G., Schkopau, Ger.

Correspondence and lists referring to butadiene patents. 1939-1941. 27f tables (Text in German) Mi $2.00 Enl Pr $5.00

See also PB 91109

For abstract, see PB 91110s 1p Mi $1.25 Ph $1.25

1. Butadiene—Production—Patents—Germany

PB 91144

I. G. Farbenindustrie A. G., Schkopau, Ger.

Correspondence and patent applications relating to methods of vulcanisation, mastication, processing of aqueous dispersions, of synthetic rubber. 1940-1944. 128f photos, graphs, tables (Text in German) Mi $5.00 Enl Pr $17.50

For abstract, see PB 91144s 2p Mi $1.25 Ph $1.25

1. Rubber, Synthetic—Production—Patents—Germany 2. Rubber, Snythetic—Vulcanization—Patents—Germany

Miscellaneous

PB 93572

Bergbau, etc. Klassen 5,1,10,26,32, 80. (Auszüge Deutscher patent-anmeldungen). Mining, etc. Classes 5,1,10,26,32,80. (Abstracts of German patent applications). (Vol. 15 of the series). n.d. 693p (Text in German) Mimeo: $17.50

1. Mines and mining—Patents—Germany 2. Series: Auszüge Deutscher patent-anmeldungen, Vol. 15

PB 82444

Germany. Reichspatentamt.

German patent application. Class 8k, group 4: Fireproofing textiles; class 8k, group 5: Fulling textiles; class 8 l, group 1: Linoleum; class 8 l, group 2: Synthetic leather; class 8 l, group 3: Roofing; class 8 l, group 4: Coatings; and class 8m, group 1: Dyeing processes. 1877-1943. 1116f (Text in German) Mi $9.00 Enl Pr $146.25

For abstract, see PB 82444s 574p Mi $9.00 Ph $72.50

1. Micro FIAT CC 79, Frames 829-1915